



CHAIR'S FINAL REPORT

September 2015

Executive summary of the RNP

The ACAT research networking programme was launched in July 2011 and terminated four years later in July 2015. Its principal mission was to help forging a community of European researchers in applied and computational algebraic topology as a supplement to the worldwide community in the field which had its center of gravity in the USA. The network was supported by contributing organizations from 12 European countries. At the end of the day, researchers from far more European countries participated in the ACAT community and profited from various scientific events in the ACAT framework.

As most other RNPs, ACAT had two major instruments to work with. Funds from ACAT were used

- to support 18 conferences and workshops and five schools; the latter were directed mainly to graduate students and early stage researchers. Several of these events would not have been possible without ACAT support; others could attract far more researchers and/or students than otherwise.
- to facilitate visits and hence collaboration between researchers from (different) European countries. In total, ACAT funded six exchange grants and 41 short visits across Europe, most of them resulting in scientific publications.

There is no doubt that both instruments have contributed to a far higher degree of mutual interaction between European researchers in the field. Cooperation and collaboration activities have been encouraged and facilitated by ACAT. Several of those would never have seen the light of day without ACAT.

ACAT has facilitated research activities between four major areas in applied and computational topology. The largest field concerns topological data analysis, with persistent homology as its principal tool. In the last few years this area has experienced a vast development of the topological concepts and methods. Even more notably is the quick development of new connections to statistics, machine learning, and many scientific subjects exploiting the tools and concepts, including the ever developing tailored software. A very sizable list of publications in the area witnesses this development.

Inspired by theoretical robotics, the new notion of topological complexity of a topological space has been investigated intensely by several groups related to ACAT. A further development of techniques has allowed them to determine or to estimate complexities, to relate them to other topological invariants and to attack important questions in algebraic topology with these new tools.

A very new development that has matured considerably in the ACAT period concerns stochastic topology, the exploration of topological spaces that arise from various probabilistic models and vastly generalizing concepts and results from random graph theory. Researchers are interested in finding out how probable it is that a space has a particular property (e.g., versions of higher connectedness). Interestingly, as in random graph theory, in many cases there are sharp thresholds dividing probability 0 from probability 1.

Methods from algebraic topology have also been used to shed light on areas within theoretical computer science, in particular Distributed Computing and Concurrency theory. In both areas, sophisticated tools from combinatorial algebraic topology have been developed, investigated and adapted to the setups within computer science. Two books with authors from the ACAT network witness this development.

The community of researchers within applied and computational algebraic topology, notably in Europe, will continue to cooperate on the topics sketched above and to take up new challenges. As a next stepping stone an international Journal of Applied and Computational Topology is about to be established, with ACAT researchers among the initiators, the managing editors, and the members of the editorial board.

RNP objectives

(a) Topological and statistical analysis of shapes, images and multi-dimensional data sets

A dominant theme in topological data analysis is *persistent homology* – this was the case when the project started and it still is. What has changed is the quickly increasing number of connections to other fields and their in-depth development.

An important aspect of the connection to *statistics* is the quantification of the statistical significance of persistent signals. Path-breaking work has come out of the collaboration between Larry Wasserman at Carnegie Mellon University and Brittany Fasy, a former student at IST Austria and participant in the network project. This connection requires refined knowledge about random topology as pursued by several key members of the network; see paragraph C below.

The connection to *machine learning* is very natural, and now we see several steps aiming at extending work in computational topology so it can be used together with standard machine learning tools. An example is the introduction of distances between persistence diagrams that satisfy the axioms of kernels; see the landscape toolbox by Pawel Dlotko and the paper on multi-scale kernels by Reininghaus, Huber, Bauer, Kwitt.

Multi-parameter persistence is a theme that gradually moves into the foreground. Early steps include vineyards as developed in Edelsbrunner's group as well as 1-parameter slices studied by the group around Massimo Ferri, Patrizio Frosini, and Claudia Landi. Motivating forces to explore this algebraically difficult topic in more depth are the distinct advantages one can achieve with a multi-parameter approach to shape recognition problems.

There are more *applications* of persistent homology studied inside and outside the ACAT community than can reasonably be mentioned here. For example, there are the phenotype-genotype questions in biology. A fundamental contribution in this direction is the adaptive topology of image data introduced early in the life of the network project by Edelsbrunner and Symonova working on image data obtained by plant biologists interested in root systems of rice and maize. Another example is the cell sorting process in early embryos. Working with the image data obtained by Gabriel Krens in the Heisenberg lab at IST Austria, Edelsbrunner and Kerber used the persistence of the time function to distinguish between a handful of moves and to quantify them. An exciting new application is the analysis of place cells in the brain responsible for the recognition of geographic locations. Working with a strong group of neuroscientists in Norway, Gard Spreeman told us at the final ACAT meeting how persistent homology can be used to reveal hidden information about these cells.

Most of the activities mentioned above could not or would not take place if there was not a continued effort to find ever faster algorithms and implementations for persistence and to make them available within easy-to-use *software* packages. A prominent example is the software developed by Bauer, Kerber, Reininghaus, Wagner at IST Austria, which can also be run in a distributed fashion and has been used to process images with a billion of voxels in a matter of minutes.

(b) Algorithms for motion planning and the study of configuration spaces of mechanical systems

The concept of topological complexity $TC(X)$ reflects the complexity of motion planning algorithms in robotics. Although motivated by applications in robotics, $TC(X)$ is a very interesting mathematical invariant. Several groups of researchers of the ACAT network investigated properties of $TC(X)$ and studied its various modifications. We may mention the work of M. Farber, M. Grant, A. Costa (UK), A. Franc, P. Pavesic (SI), A. Murillo, J.M. Calcines (ES), L. Vandembroucq (PT), and their teams.

In particular, A. Murillo and his collaborators gave a new upper bound for the topological complexity of rational spaces in terms of Sullivan models; they used it to determine the topological complexity in some new cases, and to prove a Ganea-type formula. J.M. Calcines and L. Vandembroucq analysed relationships between the topological complexity of a space X and the category of the homotopy cofibre of the diagonal map $X \rightarrow X \times X$. They established the equality of the two invariants for several classes of spaces including spheres, H -spaces, real and complex projective spaces and almost all (standard) lens spaces. M. Grant (with collaborators) studied the equivariant version of topological complexity and used it to estimate the standard topological complexity of fibre spaces. In another project, Grant classified all non-contractible spaces which have the lowest possible topological complexity. The research group from Slovenia studied spaces with high topological complexity and compared $TC(X)$ with its various modifications, including the weak and stable versions of $TC(X)$. Many researchers of the network made a great effort in resolving two intriguing open questions in the field: the Iwase-Sakai conjecture and the problem to give an algebraic characterization of topological complexity of aspherical spaces. Significant progress has been achieved recently in both directions.

(c) Statistical topology and the study of large growing systems

A substantial progress in this research direction was done with active participation of D. Feichtner-Kozlov (DE), R. Meshulam and N. Linial (IL), M. Farber (UK) and their teams. The researchers studied a new model of random 2-dimensional complexes suggested by Linial and Meshulam; this model can potentially be used for analysing properties of large growing systems with multiple interactions of objects. Various topological properties of random two-dimensional complexes produced by this model were thoroughly investigated; among them are (1) precise thresholds for collapsibility, (2) vanishing and non-vanishing of homology with field coefficients, (3) hyperbolicity (in the sense of Gromov) of fundamental groups of random complexes, (4) existence of aspherical subcomplexes of random complexes, and (5) torsion in fundamental groups of random complexes.

One of the most significant results obtained recently is a solution of a probabilistic version of the conjecture proposed by J.H.C. Whitehead in 1941 which claims that any subcomplex of an aspherical 2-complex is also aspherical. The Whitehead Conjecture remains open despite many efforts of mathematicians. A. Costa and M. Farber proved that counterexamples to the Whitehead Conjecture may appear as random 2-complexes only with probability tending to zero.

Another interesting research direction was initiated by N. Linial and R. Meshulam who introduced an interesting class of 2-dimensional trees – the sum complexes – which are useful for studying topological properties of random complexes and that exhibit some surprising properties. In particular, we may mention an interesting unexpected connection between the homological properties of sum complexes and discrete uncertainty numbers. Most recently a much more general model of multi-parameter random simplicial complexes was developed by A. Costa and M. Farber. This model includes many previously studied models as special cases and has great potential for applications in modeling large complex networks.

(d) Theory of concurrent computation and computer networks

The network has focused on establishing deep and sound links between several areas of Algebraic Topology on the one side and between the areas Concurrency Theory and Theoretical Distributed Computing within Computer Science on the other. A common theme is a description of relevant state spaces and of spaces of executions – and their relations – by combinatorially defined complexes (often simplicial complexes) and to investigate their properties using – suitably adapted – methods from the toolkit of algebraic topology.

Restrictions on the possible topology of a protocol complex relating input complex and output complex of a decision problem were at the heart of famous (un-)solvability results within Theoretical Distributed Computing. These attempts have been given a sound mathematical underpinning mainly due to the efforts of Kozlov and collaborators, allowing for extensions of the results in more complex and realistic models.

Topological investigation methods for the space of possible executions of a Higher Dimensional Automaton – viewed as a directed topological space – have been advanced considerably. These execution spaces can be given the structure of (combinatorially described) simplicial complexes or they can be seen as particular configuration spaces. This opens up for the application of sophisticated topological tools like (homotopy) colimits, decomposition theorems (wedge lemma) etc. and for new algorithms for the calculation of invariants of such spaces. Furthermore new relations to $CAT(0)$ -geometries (for mutual exclusion models) and to (discrete) Morse theory have been uncovered.

Two books by ACAT collaborators highlight the impact of applications of algebraic topological methods within theoretical computer science:

Herlihy, Kozlov, Rajsbaum, *Distributed Computing through Combinatorial Topology*, Elsevier, 2014.

Fajstrup, Goubault, Haucourt, Mimram, Raussen, *Directed Algebraic Topology and Concurrency*, Springer, 2015 (to appear).

RNP activities: scientific quality and impact

During the four years of its existence, the ACAT network has supported 18 conferences and workshops and five schools (cf. Appendix d), in various ways:

Several conferences/workshops that had been planned by ACAT collaborators could be “boosted” thanks to additional funds from ACAT that made it possible to invite additional high profile speakers, to let more graduate students participate and/or to add a school before the event aiming at undergraduate and beginning graduate students. In other cases, ACAT funds were absolutely essential to make a meeting or a school possible (although there has been an important share of financing from other sources).

The reports from meeting organizers to ACAT so far have all been very positive. In particular: Attendance to these conferences, workshops and schools has been high, often unexpectedly high. For instance, registration for the conference on Applied Topology in Bedlewo (PL) in 2013 had to be suspended due to the number of applications.

Speakers from the ACAT community have put an extra effort in explaining background, methodology, aims and results in order to reach participants within other disciplines (from either “pure” topology or from other science areas). This has led to presentations at a high scientific level that are nevertheless accessible; cf. the many presentations that are available from the meeting web sites. It should be stressed that this is both difficult and important: The research field is still new; by its very nature, it has to balance between the scientific problems (from outside mathematics) that it tries to contribute to and the needs for abstraction and theoretic development that can make it fruitful.

The overall impression is that the meetings have contributed to enhanced collaboration between researchers that already work in the ACAT community, an increase in interest in the potential of applied topology among scientists and engineers and also “pure” mathematicians, and a lot of curiosity and interest from undergraduate and graduate students.

Some of the meetings have resulted in conference proceedings; others have been a stepping stone for the

publication of research articles. In several cases, research collaboration was the result of discussions that were initiated at these meetings. It should also be mentioned that there has been a big number of meetings/visits with participation of ACAT collaborators with funds from other sources.

After a slow start, the short visit and exchange grant programme under ACAT grew over the years: ACAT could support six exchange grants (between 4 and 13 weeks) and 41 short visits (mostly week-long). In all cases, the reports to the network witness of well-prepared and intensive visits; in many cases between researchers that had already collaborated previously; in some cases, serious collaboration was initiated during such visits, for example between collaborators from Poland, Austria and Italy. Many of these visits have resulted in publications in which support from ACAT is acknowledged; more to come!

European added value and RNP visibility

The ACAT community views itself as the European branch of a worldwide movement attempting to make insights and techniques from algebraic topology applicable and useful in Science and Engineering. It collaborates with the world's leading scientists in the field, in particular from the USA; participation in conferences and workshops is an important way to influence and incorporate up-to-date techniques and developments. Several ACAT collaborators have participated (as invited guests and as speakers) in the IMA Thematic Year on Scientific and Engineering Applications of Algebraic Topology 2013-14 at the University of Minnesota allowing them to establish or refresh contacts to leading researchers in the area.

Let us add that topological data analysis is now commercially applied in the big data mining firm [Ayasdi](#) as an offspring of academic research. Within Europe, we mention particularly two large collaborative projects involving participants of from ACAT: the 7th framework project [Topological Complex Systems](#) that aims at connecting the topological framework with the vast body of dynamical systems applications, and the *Discrete and Computational Geometry* mega project funded by the Russian Government and led by Edelsbrunner.

The ACAT network has been advertised, in talks and through brochures at many conferences during its lifetime. Apart from the ACAT conferences and the IMA special year, the conferences Algebraic Topology – methods, Computation and Science in Edinburgh (2012) and Vancouver (2014) deserve to be mentioned; Moreover, the 6th European Congress of Mathematics in Krakow (Poland) in 2012: Herbert Edelsbrunner from ACAT was one of the ten plenary speakers at the congress.

RNP management and finances

ACAT has been managed at three levels: The most important decisions (in particular funding of conferences, workshops and schools) were taken at the annual meetings of the steering committee, in few cases, the steering group deliberated via e-mail in periods between the meetings. Decisions about exchange grants and short visits were taken by a grant committee consisting of three committee members including the chairman.

The chairman organized the committee meetings in collaboration with a local organizer. He was responsible for correspondence with the ESF and with committee members in-between the committee meetings. He had substantial help from the secretariat at the Department of Mathematical Sciences at Aalborg University, in particular with maintenance of the mailing list and its use for the dissemination of newsletters and other information of common interest, as well as with the elaboration of the midterm and of this final report.

According to Appendix c), after deduction of written-offs and doubtful debts, ACAT received 353325€ in contributions. Of these, 69283€ had to be paid for ESF administrative costs, leaving 284042€. Internal coordination and administration amounted to 19889€ (7% of the available amount), science events to 255984€ (90%; hereof support of conferences, workshops and schools 190391€ (67%), exchange grants and visits 64003€ (22.5%), brochure 1590€ (0.5%)). An amount of 8169€ (2.9%) was not spent at the end of the programme.

Main reason: We had kept a reserve for the final steering committee meeting in Vienna that actually was not used since almost all of the committee members were invited to participate in the final project meeting.

Publicity and publications: scientific quality and impact

A [brochure](#) presenting ACAT and its aim was completed in 2012; it has been advertised and distributed at many conferences in the area since. ACAT has, apart from the website at [ESF](#), established its own [website](#) with, among others, a list of upcoming events and an archive of the ten ACAT Newsletters.

As the list of publications (certainly not complete) witnesses, network collaborators publish widely; the range is from prestigious academic journals in pure mathematics to proceedings for conferences in e.g. Vision and Robotics. Almost all publications have been peer-reviewed; a number of them are still on their way through the refereeing system.

Future perspectives

During its lifetime, the ACAT programme allowed to forge a community of European researchers within applied and computational algebraic topology; a community that will continue to collaborate, to produce influential results and that will be perceived as an important partner for researchers abroad. The steering committee has decided to continue the network on an informal basis, including regular newsletters and maintenance and use of the existing mailing list. Relations to the international [Applied Topology community](#) will be intensified. A few initiatives from the international and the national arenas deserve to be mentioned particularly:

Many members of the international community within applied topology have felt a need for a journal focusing on the area and crossing the border between topologists working on applications and scientists employing topological methods. Three ACAT collaborators and four US researchers have taken the initiative to found the Journal of Applied and Computational Topology. Negotiations with a renowned publisher are about to conclude, and we hope that the journal can start appearing within a year.

ACAT collaborators will participate actively in the ICERM programme [Topology in motion](#) at Brown University in the fall of 2016.

After an application, the [Hausdorff Institute Research Institute for Mathematics](#) in Bonn (DE) has invited a group of researchers from the ACAT network to organize a special event within the area in 2017; in the form of a two-week long conference (including school activities) in the spring and of a month devoted to collaboration in the fall.

ACAT researchers from Slovenia, Poland, Denmark, France and Germany have applied for a twinning grant ACCAPT (Accelerating Applied Topology) under the HORIZON 2020 programme of the EU.

In the UK, a research network [Applied Algebraic Topology](#) has been founded with funds from the London and Edinburgh Mathematical Societies. A promising collaboration initiative with network scientists has recently started.

Appendices

- Appendix a): ACAT Steering committee
- Appendix b): ACAT Contributors
- Appendix c): ACAT Expenditure Overview
- Appendix d): ACAT Activities
- Appendix e): Participation Statistics
- Appendix f): Digital Infrastructures
- Appendix g): References
- Appendix h): Testimonials

ESF-PESC Networking Programme

Applied and Computational Algebraic Topology



ACAT STEERING COMMITTEE

September 2015

Chair:

Martin Raussen, Aalborg University, Department of Mathematical Sciences, Aalborg (DK)

Members:

Herbert Edelsbrunner, Institute of Science and Technology Austria, Klosterneuburg (A)

Graham Ellis, National University of Ireland, Department of Mathematics, Galway (IRL)

Michael Farber, Queen Mary University, School of Mathematical Sciences, London (UK)

Dmitry Feichtner-Kozlov, University of Bremen, FB3 Mathematik, Bremen (D); observer during the last year

Massimo Ferri, University of Bologna, Dipartimento di Matematica, Bologna (I)

Eric Goubault, Laboratoire d'Informatique de l'École polytechnique, Palaiseau (F)

Thomas Kappeler, University of Zurich, Institute of Mathematics, Zurich (CH)

Neza Mramor-Kosta, University of Ljubljana, Faculty of Computer and Information Science, Ljubljana (SLO)

Marian Mrozek, Jagellonian University, Chair of Computational Mathematics, Department of Computer Science, Krakow (PL)

Aniceto Murillo, Universidad de Malaga, Dept. Algebra Geometria y Topologia, Malaga (E)

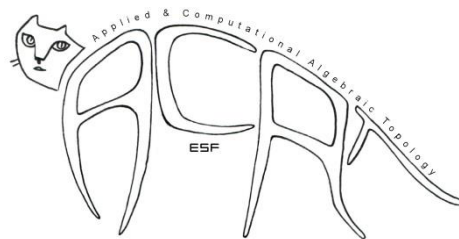
Lucile Vandembroucq, Universidad de Minho, Centro de Matematica, Braga (P)

Observer:

Roy Meshulam, Technion – Israel Institute of Technology, Department of Mathematics, Haifa (IL)

ESF-PESC Networking Programme

Applied and Computational Algebraic Topology



ACAT CONTRIBUTORS

September 2015

Austria:

Fonds zur Förderung der Wissenschaftlichen Forschung in Österreich (FWF)

Denmark:

The Danish Council for Independent Research (DFF)
Aalborg University

Germany:

Deutsche Forschungsgemeinschaft (DFG)

France:

Centre National de la Recherche Scientifique (CNRS)
Commissariat à l'Energie Atomique (CEA)

Ireland:

National University of Ireland, Galway

Italy:

University of Bologna - ARCES Centro di Ricerca sui Elettronici

Poland:

University of Warsaw
Jagiellonian University
Nicolaus Copernicus University

Portugal:

Centro de Matematica da Universidade do Minho

Slovenia:

Slovenian Research Agency
University of Ljubljana

Spain:

Universidad de Malaga

Switzerland:

Schweizerischer Nationalfonds (SNF)

United Kingdom:

University of Warwick

Applied and Computational Algebraic Topology (ACAT)

Formal duration of programme:

July 2011 - July 2015

(Report in Euros)

Income and Expenditure Overview - Final Report

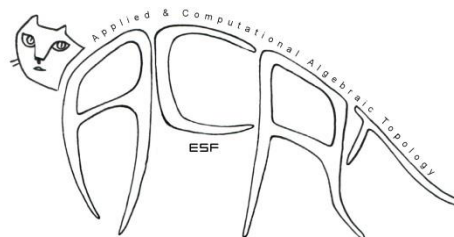
Income	2011	2012	2013	2014	2015	GRAND TOTAL
TOTAL CONTRIBUTIONS	101 988	101 988	101 988	75 488	0	381 450

Expenditure		2011	2012	2013	2014	situation @ 27.08.15		GRAND TOTAL
						2015 Paid	2015 Committed	
Science Events & Activities	TOTAL SCIENCE EVENTS & ACTIVITIES	8 053	23 181	48 185	67 022	107 543	2 000	255 984
	* Workshops, Conferences, Schools	6 500	12 651	27 984	48 068	93 188	2 000	190 391
	* Exchange Grants, Short Visits	1 553	8 940	20 201	18 954	14 355	0	64 003
	* Database Preparation, Computing							0
	* Publication, Publicity, Website		1 590					1 590
Scientific Coordination & Administration	TOTAL COORDINATION & ADMINISTRATION	20 944	21 614	23 425	20 825	2 363	0	89 172
	* Steering Committee costs	6 156	1 727	1 513	4 093	363	0	13 852
	* External Coordination costs			2 011	2 000	2 000	0	6 011
	* ESF Administrative costs	14 788	19 888	19 888	14 720			69 283
	* Miscellaneous costs			14.3	12			26
Other costs	TOTAL DOUBTFUL DEBTS/WRITTEN OFFS			9 375	18 750			28 125
	National Louis Univ. (2011 to 2014 written-off)			6 250	18 750			25 000
	National Univ. Ireland (2011 doubtful debt)			3 125				3 125
TOTAL USE OF FUNDS	28 997	44 796	80 985	106 598	109 906	2 000	373 281	

EXPECTED BALANCE AT PROGRAMME-END	(situation at 27.08.2015)	8 169 €
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ESF-PESC Networking Programme

Applied and Computational Algebraic Topology



ACAT ACTIVITIES

September 2015

ACAT SCIENCE MEETINGS

2015

Workshop - ACAT Final Project Meeting

Dates and location : 06 - 10 July 2015, IST Austria

Convened by : Herbert Edelsbrunner (AT)

Summer School on Computational Topology

Dates and location : 22 - 27 June 2015, Ljubljana, Slovenia

Convened by : Nezka Mramor Kosta (SI)

Conference - Dynamics, Topology and Computation, DyToComp 2015

Dates and location : 15 - 20 June 2015, Bedlewo, Poland

Convened by : Tomasz Kapela (PL)

Workshop - Special Session "Applied Algebraic Topology"

Dates and location : 10 - 13 June 2015, AMS-EMS-SPM joint meeting, Porto, Portugal

Convened by : Lucile Vandembroucq (PT)

Conference - Homotopy in Concurrency and Rewriting

Dates and location : 25 - 28 May 2015, École Polytechnique, Palaiseau, France

Convened by : Samuel Mimram (FR)

Conference - Geometric and Topological Methods in Computer Science

Dates and location : 07 - 10 April 2015, Aalborg University, Denmark

Convened by : Martin Raussen (DK)

Conference - XXI Oporto Meeting on Geometry, Topology and Physics

Dates and location : 04 - 07 February 2015, Lisbon, Portugal

Convened by : Roger Francis Picken (PT)

2014

Seventh de Brun Workshop on Homological Perturbation Theory

Dates and location : 01 - 05 December 2014, NUI Galway, Galway, Ireland

Convened by : Graham Ellis (IE)

Workshop - Advanced Course and Research Workshop "Applied Algebraic Topology"

Dates and location : 26 June - 04 July 2014, CIEM Castro Urdiales, Spain

Convened by : Aniceto Murillo (ES)

Appendix d

Conference - Mathematical Structures of Computation

Dates and location : 13 January - 14 February 2014, Lyon - France

Convened by : Philippe Malbos (FR)

2013

Conference - Applied Topology Bedlewo 2013

Dates and location : 22 - 27 July 2013, Conference Center of IM PAN, Bedlewo, Poland

Convened by : Waclaw Marzantowicz (PL)

Conference - Applied and Computational Algebraic Topology

Dates and location : 15 - 19 July 2013, Bremen, Germany

Convened by : Dmitry Feichtner (DE)

Workshop - Computer algebra in algebraic topology and its applications

Dates and location : 03 - 05 July 2013, Malaga

Convened by : Aniceto Murillo (ES)

School - Summer school on computational topology and topological data analysis

Dates and location : 01 - 05 July 2013, Ljubljana, Slovenia

Convened by : Neza Mramor Kosta (SI)

Conference - International Conference on Discrete Geometry for Computer Imagery

Dates and location : 20 - 22 March 2013, Sevilla, Spain

Convened by : Rocio Gonzalez-Diaz (ES)

2012

Workshop - ACAT in Aalborg

Dates and location : 05 - 07 September 2012, Aalborg University, Denmark

Convened by : Lisbeth Fajstrup (DK)

Workshop - Applied and Computational Algebraic Topology

Dates and location : 03 July 2012, 6ECM Krakow, Poland

Convened by : Martin Raussen (DK)

Conference - Dynamics, Topology and Computations

Dates and location : 24 - 30 June 2012, Bedlewo, Poland

Convened by : Marian Mrozek (PL)

Conference - CTIC 2012

Dates and location : 28 - 30 May 2012, Bertinoro, Italy

Convened by : Massimo Ferri (IT)

ACAT school

Dates and location : 25 - 26 May 2012, Bologna, Italy

Convened by : Massimo Ferri (IT)

2011

Appendix d

School - Computational Algebraic Topology applied to Medical Imagery

Dates and location : 17 - 18 October 2011, Chipiona (Cádiz) Spain

Convened by : Pedro Real (ES)

EXCHANGE GRANTS

2015

The log transform approach to measuring text documents and applications of coarse geometry to computational topology

Dates : 01 March 2015 for 10 weeks

Grantee : Ziga Virk (SI)

Host(s) : Herbert Edelsbrunner (AT)

Topological issues arising from lattice polytopes and combinatorial spaces

Dates : 05 January 2015 for 6 weeks

Grantee : Mónica Blanco (ES)

Host(s) : Günter M. Ziegler (DE)

2014

Stratified Discrete Morse Theory

Dates : 30 October 2014 for 10 weeks

Grantee : Barbara Di Fabio (IT)

Host(s) : Neza Mramor-Kosta (SI)

Conley index applied to switched controlled systems

Dates : 15 September 2014 for 13 weeks

Grantee : Sameh Mohamed (FR)

Host(s) : Marian MROZEK (PL)

2013

Applied Computational Group Theory

Dates : 04 November 2013 for 12 weeks

Grantee : Graham Ellis (IE)

Host(s) : Herbert Edelsbrunner (AT)

2012

Computation of the homological Conley index over the phase space for semidynamical systems with discrete time

Dates : 03 August 2012 for 4 weeks

Grantee : Jacek Szybowski (PL)

Host(s) : Pawel Pilarczyk (PT)

SHORT VISITS

2015

Applied and Computational Algebraic Topology

Dates : 05 July 2015 for 7 days

Appendix d

Grantee : Rade Zivaljevic (RS)
Host(s) : Herbert Edelsbrunner (AT)

Towards gaining a better understanding of bidimensional persistent homology

Dates : 30 June 2015 for 5 days

Grantee : Marc Ethier (PL)

Host(s) : Patrizio Frosini (IT)

Topological analysis of 3D images

Dates : 21 June 2015 for 15 days

Grantee : Maria-Jose Jimenez (ES)

Host(s) : Noel E. O'Connor (IE)

An acyclic subspace approach to the computation of the homomorphism induced in homology by a correspondence

Dates : 13 May 2015 for 5 days

Grantee : Pawel Pilarczyk (AT)

Host(s) : Marian Mrozek (PL)

GETCO and visit to Martin Raussen and Lisbeth Fajstrup

Dates : 06 April 2015 for 13 days

Grantee : Jérémy Dubut (FR)

Host(s) : Martin Raussen (DK)

Invariants of knots and knotted graphs from point clouds

Dates : 09 March 2015 for 14 days

Grantee : Vitaliy Kurlin (UK)

Host(s) : Herbert Edelsbrunner (AT)

Stability of numeric invariants from multidimensional persistence

Dates : 12 January 2015 for 5 days

Grantee : Claudia Landi (IT)

Host(s) : Wojciech Chacholski (SE)

2014

Applications of discrete Morse theory to concurrency

Dates : 17 November 2014 for 10 days

Grantee : Nezka Mramor Kosta (SI)

Host(s) : Lisbeth Fajstrup (DK)

PV-programs. Fixed capacities and symmetry

Dates : 25 August 2014 for 4 days

Grantee : Lisbeth Fajstrup (DK)

Host(s) : Krzysztof Ziemianski (PL)

Spaces of directed paths and configuration spaces

Dates : 25 August 2014 for 4 days

Grantee : Martin Raussen (DK)

Host(s) : Krzysztof Ziemianski (PL)

Distances of topological descriptors

Dates : 19 July 2014 for 14 days

Appendix d

Grantee : Ulrich Bauer (AT)

Host(s) : Claudia Landi (IT)

Generalized cohomological tools for estimating topological complexity of robot motion planning algorithms.

Dates : 18 May 2014 for 7 days

Grantee : Michael Farber (UK)

Host(s) : Lucile Vandembroucq (PT)

Persistent homology and invariance groups for computer vision

Dates : 01 April 2014 for 11 days

Grantee : Grzegorz Jablonski (PL)

Host(s) : Patrizio Frosini (IT)

Persistent homology of the generalized eigenvectors

Dates : 14 March 2014 for 14 days

Grantee : Grzegorz Jablonski (PL)

Host(s) : Herbert Edelsbrunner (AT)

Lusternik-Schnirelmann category of Lie groups and symmetric spaces

Dates : 09 March 2014 for 7 days

Grantee : María José Pereira-Sáez (ES)

Host(s) : Daniel Tanré (FR)

Knotted saddle periodic orbit in Beltrami flows

Dates : 10 February 2014 for 5 days

Grantee : Jens Kasten (DE)

Host(s) : Jan Reininghaus (AT)

Controlled Simplification of 3D Scalar Fields

Dates : 13 January 2014 for 5 days

Grantee : David Guenther (FR)

Host(s) : Herbert Edelsbrunner (AT)

2013

Topological Complexity and related invariants

Dates : 09 December 2013 for 7 days

Grantee : Lucile Vandembroucq (PT)

Host(s) : Michael Farber (UK)

Some conjectures on the topological complexity and related invariants

Dates : 23 November 2013 for 8 days

Grantee : Jose Calcines (ES)

Host(s) : Lucile Vandembroucq (PT)

RiP Research stay at Oberwolfach

Dates : 08 September 2013 for 14 days

Grantee : ENRIQUE MACIAS-VIRGOS (ES)

Host(s) : Dietmar Kröner (DE)

Discrete Morse Theory on Infinite Complexes

Dates : 08 September 2013 for 7 days

Appendix d

Grantee : Gregor Jerše (SI)

Host(s) : Jose Antonio Vilches Arcon (ES)

Discrete Morse functions on infinite complexes

Dates : 08 September 2013 for 7 days

Grantee : Neza Mramor Kosta (SI)

Host(s) : Jose Antonio Vilches Alarcon (ES)

Algorithms for the computation of cohomology operations in the context of cubical complexes

Dates : 07 July 2013 for 15 days

Grantee : Pawel Pilarczyk (PT)

Host(s) : Pedro Real (ES)

Algorithmic and theoretical issues related to automatic computation of the homological Conley index over the phase space for semidynamical systems with discrete time

Dates : 17 June 2013 for 8 days

Grantee : Jacek Szybowski (PL)

Host(s) : Paweł Pilarczyk (PT)

Directed Algebraic Topology and Concurrency

Dates : 11 June 2013 for 4 days

Grantee : Lisbeth Fajstrup (DK)

Host(s) : Eric Goubault (FR)

Directed algebraic topology and concurrency

Dates : 11 June 2013 for 4 days

Grantee : Martin Raussen (DK)

Host(s) : Eric Goubault (FR)

Topology of random simplicial complexes

Dates : 01 June 2013 for 11 days

Grantee : Michael Farber (UK)

Host(s) : Roy Meshulam (IL)

Topology of Random Complexes

Dates : 05 May 2013 for 10 days

Grantee : Armino Costa (UK)

Host(s) : Thomas Kappeler (CH)

On Persistence

Dates : 02 May 2013 for 15 days

Grantee : Francisco Belchi Guillamon (ES)

Host(s) : Graham Ellis (IE)

2012

Random Complexes and Applications

Dates : 14 October 2012 for 14 days

Grantee : Armino Costa (UK)

Host(s) : Thomas Kappeler (CH)

Appendix d

Topology of random complexes

Dates : 08 September 2012 for 7 days

Grantee : Roy Meshulam (IL)

Host(s) : Michael Farber (UK)

Topology of random simplicial complexes

Dates : 13 June 2012 for 8 days

Grantee : Michael Farber (UK)

Host(s) : Roy Meshulam (IL)

Algorithmic aspects of the computation of the homological Conley index over the phase space for semidynamical systems with discrete time

Dates : 18 May 2012 for 4 days

Grantee : Pawel Pilarczyk (PT)

Host(s) : Jacek Szybowski (PL)

Computing maps persistence

Dates : 02 May 2012 for 15 days

Grantee : Grzegorz Michal Jablonski (PL)

Host(s) : Herbert Edelsbrunner (AT)

Stochastic topology and concurrent computation

Dates : 13 February 2012 for 11 days

Grantee : Michael Farber (UK)

Host(s) : Eric Goubault (FR)

Spaces of directed paths

Dates : 15 January 2012 for 6 days

Grantee : Krzysztof Ziemianski (PL)

Host(s) : Martin Hubert Raussen (DK)

2011

Computational Algebraic Topology in Concurrency Theory

Dates : 25 September 2011 for 14 days

Grantee : Mateusz Juda (PL)

Host(s) : Martin Raussen (DK)

Appendix e

Activity	Role	Location	Start	End	Title	Firstname	Surname	Sex	
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Tomas	Johnson	M	Uppsala
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Neza	Mramor Kosta	F	Univerzita
Conferences	Speaker	Aalborg University, Denmark	07-apr-15	10-apr-15	Prof.	Neza	Mramor Kosta	F	Univerzita
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Prof.	Neza	Mramor Kosta	F	Univerzita
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	Aleksandra	Franc	F	Univerzita
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	Aleksandra	Franc	F	Univerzita
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Mr.	Dejan	Govc	M	Univerzita
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	Petar	Pavešic	M	Univerzita
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Ketty	De Rezende	F	Univerzita
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Ewerton	Vieira	M	Univerzita
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Denise	De Mattos	F	Univerzita
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Edivaldo	Lopes Dos Santos	M	Univerzita
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Paulino Lima	Fortes	M	Univerzita
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Peter	Franeek	M	Academicki
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	Peter	Franeek	M	Academicki
Conferences	Participant	Aalborg University, Denmark	07-apr-15	10-apr-15	Dr.	Nina	Otter	F	Univerzita
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Mr.	Miradain	Atontsa Nguemo	M	Univerzita
Conferences	Speaker	Lyon - France	13-jan-14	14-feb-14	Prof.	Catharina	Stroppel	F	Univerzita
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Viktor	Fromm	M	Humboldt
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Frank Hagen	Lutz	M	Technische
Conferences	Speaker	Aalborg University, Denmark	07-apr-15	10-apr-15	Dr.	Ulrich	Bauer	M	TU Maastricht
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	Ulrich	Bauer	M	TU Maastricht
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Pavle	Blagojevic	M	FU Beograd
Conferences	Participant	Aalborg University, Denmark	07-apr-15	10-apr-15	Mr.	Jan-Philipp	Litza	M	Univerzita
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Dr.	Ainhua	Berciano Alcaraz	F	Univerzita
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Prof.	Jose Antonio	Vilches Alarcón	M	Univerzita
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Jose Antonio	Vilches Alarcón	M	Univerzita
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Jose Antonio	Vilches Alarcón	M	Univerzita
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Arturo	Vieiro	M	Univerzita
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Desamaparados	Fernández Terner	F	Univerzita
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	María José	Pereira-Sáez	F	Univerzita
Conferences	Speaker	Lyon - France	13-jan-14	14-feb-14	Prof.	Alexis	Virelizier	M	Univerzita

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Conferences	Speaker	Lyon - France	13-jan-14	14-feb-14	Mr.	Luis	Paris	M	Unive
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Prof.	Patrick	Dehornoy	M	Unive
Conferences	Speaker	Lyon - France	13-jan-14	14-feb-14	Prof.	Patrick	Dehornoy	M	Unive
Conferences	Speaker	Bertinoro, Italy	28-maj-12	30-maj-12	Prof.	Frédéric	Chazal	M	INRIA
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Frédéric	Chazal	M	INRIA
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Prof.	Frédéric	Chazal	M	INRIA
Conferences	Speaker	Lyon - France	13-jan-14	14-feb-14	Mr.	Jean-Christophe	Filliatre	M	Unive
Conferences	Speaker	Lyon - France	13-jan-14	14-feb-14	Mrs.	Laurence	Rideau	F	
Conferences	Speaker	Aalborg University, Denmark	07-apr-15	10-apr-15	Dr.	Steve Y.	Oudot	M	
Conferences	Speaker	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Dr.	Steve Y.	Oudot	M	
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Pierre	Cagne	M	Unive
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Cyrille	Chenavier	M	Unive
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Kenji	Maillard	M	ENS U
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Massimo	Ferri	M	Unive
Conferences	Participant	Bremen, Germany	15-jul-13	19-jul-13	Prof.	Massimo	Ferri	M	Unive
Conferences	Organiser	Bertinoro, Italy	28-maj-12	30-maj-12	Prof.	Massimo	Ferri	M	Unive
Conferences	Speaker	Aalborg University, Denmark	07-apr-15	10-apr-15	Dr.	Patrizio	Frosini	M	Univ.
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Dr.	Patrizio	Frosini	M	Univ.
Conferences	Organiser	Bertinoro, Italy	28-maj-12	30-maj-12	Dr.	Patrizio	Frosini	M	Univ.
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Ugo	Locatelli	M	Unive
Conferences	Organiser	Bertinoro, Italy	28-maj-12	30-maj-12	Dr.	Andrea	Cerri	M	Unive
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Mr.	Mattia Giuseppe	Bergomi	M	
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Matteo	Acclavio	M	
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Soichiro	Fujii	M	Unive
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Younggi	Choi	M	
Conferences	Speaker	Aalborg University, Denmark	07-apr-15	10-apr-15	Dr.	Armando	Castañeda	M	Unive
Conferences	Organiser	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Marco	Mackaay	M	Unive
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	Morten	Brun	M	
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Roman	Szrednicki	M	Jagiel
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Robert	Szczelina	M	Jagiel
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Ms.	Sylwia	Antoniuk	F	Adam
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Jacek	Cyranka	M	Jagiel
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Ms.	Marta	Kowalczyk	F	Unive

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Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Marcin	Kulczycki	M	Jagiel
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Agnieszka	Siluszyk	F	Unive
Conferences	Organiser	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	João Nuno	Tavares	M	Unive
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	Armindo	Costa	M	Unive
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	Armindo	Costa	M	
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	João Miguel	Nogueira	M	Unive
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	João Miguel	Nogueira	M	Unive
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Sinisa	Vrecica	F	Unive
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Ms.	Marija	Jelic	F	
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Ljubica	Velimirovic	F	Unive
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Irina	Makarenko	F	Newc
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Evgeny	Shchepin	M	
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Dirk	Schuetz	M	Unive
Conferences	Speaker	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Timothy	Porter	M	Unive
Conferences	Speaker	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Richard	Steiner	M	Unive
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Hiroshi	Kokubu		Kyoto
Conferences	Speaker	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Dr.	Marcelo	Fiore	M	Unive
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Facundo	Memoli	M	Unive
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Prof.	Facundo	Memoli	M	Unive
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Gabriel	Minian	M	Unive
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Miss	Ines	Janusch	F	Techn
Conferences	Speaker	Bertinoro, Italy	28-maj-12	30-maj-12	Prof.	Walter	Kropatsch	M	Techn
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Mr.	Isaac	Mabillard	M	
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Dr.	Vitaliy	Kurlin	M	Durha
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	Vitaliy	Kurlin	M	Durha
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Nick	Scoville	M	Ursin
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Calin	Guet	M	IST Au
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Prof.	Matthew	Kahle	M	The C
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Matthew	Kahle	M	The C
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Matthew	Kahle	M	The C
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Eric	Babson	M	
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Michele	Intermont	F	
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Prof.	Kevin	Knudson	M	Unive

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Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	Jose	Perea	M	Duke
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Michael	Robinson	M	
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Mr.	Han	Wang	M	Unive
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Zachery	Lindsey	M	Indiar
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Hanna	Härdin	F	Upps
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Warwick	Tucker	M	Upps
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	Gregor	Jerse	M	Unive
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Petar	Pavesic	M	Unive
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Dr.	Miroslav	Rypka	M	
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Sadok	Kallel	M	Amer
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Mr.	Mehmet Akif	Yetim	M	Suley
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Ms.	Dahisy	Lima	F	Unive
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Alexander	Prokopenya	M	Unive
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Jean-Philippe	Lessard	M	Unive
Conferences	Speaker	Aalborg University, Denmark	07-apr-15	10-apr-15	Prof.	Rick	Jardine	M	Unive
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Prof.	Rick	Jardine	M	Unive
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Siu Por	Lam	M	Capit
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Karim	Adiprasito	M	
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Ulrich	Koschorke	M	Unive
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	Raphael	Zentner	M	Unive
Conferences	Participant	Aalborg University, Denmark	07-apr-15	10-apr-15	Mr.	Tim	Haga	M	Unive
Conferences	Speaker	Aalborg University, Denmark	07-apr-15	10-apr-15	Dr.	Damien	Imbs	M	Unive
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Thomas	Kahl	M	
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Lutz	Strassburger	M	INRIA
Conferences	Speaker	Lyon - France	13-jan-14	14-feb-14	Mr.	Ulrich (Uli)	Fahrenberg	M	
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Lisbeth	Fajstrup	F	Aalbo
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Prof.	Lisbeth	Fajstrup	F	Aalbo
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Lisbeth	Fajstrup	F	Aalbo
Conferences	Organiser	Aalborg University, Denmark	07-apr-15	10-apr-15	Prof.	Lisbeth	Fajstrup	F	Aalbo
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Lisbeth	Fajstrup	F	Aalbo
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Rafael	De La Llave	M	Georg
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Amadeu	Delshams	M	Unive
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Ms.	Marta	Canadell	F	Unive

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Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Alex	Haro	M	Unive
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Luis	Hernandez-Corbat	M	Unive
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Dr.	Maria Asuncion	Sastre	F	
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Mr.	Francisco	Belchi Guillamon	M	Unive
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Dr.	Carmen	Escribano	F	
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Francisco Romerc	Ruiz Del Portal	M	Unive
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Jaime	Sanchez-Gabites	M	Unive
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	J. Mikael	Karimäki	M	
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Jean-Marie	Strelcyn	M	Unive
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Prof.	Pierre-Louis	Curien	M	Unive
Conferences	Speaker	Lyon - France	13-jan-14	14-feb-14	Prof.	Pierre-Louis	Curien	M	Unive
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Prof.	Marc	Giusti	M	Ecole
Conferences	Speaker	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Prof.	Vladimir	Dotsenko	M	Trinity
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Prof.	Dominique	Attali	F	CNRS
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Kallel	Sadok	M	Unive
Conferences	Speaker	Lyon - France	13-jan-14	14-feb-14	Mrs.	Christine	Tasson	F	Unive
Conferences	Participant	Aalborg University, Denmark	07-apr-15	10-apr-15	Mr.	Jérémy	Dubut	M	
Conferences	Speaker	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Jérémy	Dubut	M	
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Stéphane	Gaussent	M	Unive
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Adrien	Guatto	M	Ecole
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Yves	Lafont	M	I2M-A
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Ferenc	Bartha	M	Unive
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Michael	Werman	M	Hebre
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Abhishek	Rathod	M	Indian
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Parameswaran	Sankaran	M	
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Davide L.	Ferrario	M	Unive
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Davide L.	Ferrario	M	Unive
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Claudia	Landi	F	Unive
Conferences	Speaker	Aalborg University, Denmark	07-apr-15	10-apr-15	Dr.	Claudia	Landi	F	Unive
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Dr.	Claudia	Landi	F	Unive
Conferences	Organiser	Bertinoro, Italy	28-maj-12	30-maj-12	Dr.	Claudia	Landi	F	Unive
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Dr.	Luca	Chiarabini	M	
Conferences	Organiser	Bertinoro, Italy	28-maj-12	30-maj-12	Dr.	Barbara	Di Fabio	F	Unive

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Conferences	Participant	Aalborg University, Denmark	07-apr-15	10-apr-15	Dr.	Daniele	Toller	M	Unive
Conferences	Participant	Aalborg University, Denmark	07-apr-15	10-apr-15	Mr.	Fabian	Romero	M	Unive
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Jan Bouwe	Van Den Berg	M	VU U
Conferences	Participant	Bremen, Germany	15-jul-13	19-jul-13	Mr.	Magnus Bakke	Botnan	M	
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Mr.	Magnus Bakke	Botnan	M	
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Mr.	Kristian	Alfsvåg	M	
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	Jose	Agapito Ruiz	M	Unive
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Wojciech Jerzy	Zakrzewski	M	Unive
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Piotr	Kamienski	M	Jagiel
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	Jaroslaw	Kedra	M	Unive
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Rafal	Komendarczyk	M	Tulan
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	Marek	Kaluba	M	Adam
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	Marek	Kaluba	M	Adam
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	Wojciech	Politarczyk	M	Adam
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	Krzysztof	Ziemianski	M	Unive
Conferences	Speaker	Aalborg University, Denmark	07-apr-15	10-apr-15	Dr.	Krzysztof	Ziemianski	M	Unive
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Krzysztof	Ziemianski	M	Unive
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Daisuke	Kishimoto	M	
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	Iriye	Kouyemon	M	Osaka
Conferences	Participant	Aalborg University, Denmark	07-apr-15	10-apr-15	Mr.	Grzegorz Michal	Jablonski	M	Jagiel
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Grzegorz Michal	Jablonski	M	Jagiel
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Mr.	Grzegorz Michal	Jablonski	M	Jagiel
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Mr.	Grzegorz Michal	Jablonski	M	Jagiel
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Jesus	Gonzalez	M	
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	Barbara	Gutierrez	F	
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Mr.	Piotr	Brendel	M	Jagiel
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Piotr	Brendel	M	Jagiel
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Dr.	Pawel	Dlotko	M	Jagiel
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Pawel	Dlotko	M	Jagiel
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Wieslaw	Palka	M	Jagiel
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Lukasz	Piekos	M	Jagiel
Conferences	Speaker	Aalborg University, Denmark	07-apr-15	10-apr-15	Dr.	Hubert	Wagner	M	
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Dr.	Hubert	Wagner	M	Jagiel

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Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Dr.	Hubert	Wagner	M	Jagiel
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Grzegorz	Graff	M	Gdan
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Jacek	Gulgowski	M	Unive
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Mr.	Michal Jerzy	Kukiela	M	
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	Blaszczyk	Zbigniew	M	Nicola
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	Zbigniew	Blaszczyk	M	
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	Manya Vital	Afonso	M	
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Ms.	Vera	Viana	F	
Conferences	Speaker	Aalborg University, Denmark	07-apr-15	10-apr-15	Dr.	Pawel	Dlotko	M	Unive
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	Pawel	Dlotko	M	Unive
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Mr.	Bartosz	Zaleski	M	Adam
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Ms.	Lidija	Comic	F	
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Milan	Zlatanovic	M	Unive
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Igor	Bogolubsky	M	
Conferences	Speaker	Lyon - France	13-jan-14	14-feb-14	Mr.	Vladimir	Verchinine	M	Unive
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Michael	Farber	M	Unive
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Prof.	Michael	Farber	M	Unive
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Michael	Farber	M	
Conferences	Organiser	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Roger	Picken	M	Unive
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Mark	Grant	M	Unive
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	George	Haller	M	McGil
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Hellen	Colman	F	
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Hellen	Colman	F	
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	Henry	Adams	M	
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Omer	Bobrowski	M	Duke
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Prof.	Peter	Bubenik	M	Cleve
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Peter	Bubenik	M	Cleve
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Dr.	Paul	Bendich	M	Duke
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Konstantin	Mischaikow	M	Rutge
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Gil	Cavalcanti	M	Unive
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Dr.	Erald	Vucini	M	
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Mr.	Justin	Curry	M	Unive
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Shmuel	Weinberger	M	Chica

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Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Matthew	Wright	M	Hunt
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	Antonio	Rieser	M	Techn
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Noam	Zeilberger	M	MSR-
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Nohra	Hage	M	Institu
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Jordi-Lluís	Figueras	M	Uppsala
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Denis	Gaidashev	M	Uppsala
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Mioara	Joldes	F	Uppsala
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Dr.	Peter	Lendero	M	Unive
Conferences	Speaker	Aalborg University, Denmark	07-apr-15	10-apr-15	Dr.	Primož	Skraba	M	
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Mr.	Nelson	Antonio Silva	M	Unive
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Mr.	Marc	Éthier	M	
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Martin	Pinsonnault	M	Unive
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Uli	Wagner	M	EPFL
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Martin	Rausen	M	Aalbo
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Prof.	Martin	Rausen	M	Aalbo
Conferences	Organiser	Aalborg University, Denmark	07-apr-15	10-apr-15	Prof.	Martin	Rausen	M	Aalbo
Conferences	Speaker	Sevilla, Spain	20-mar-13	22-mar-13	Dr.	Konrad	Polthier	M	FU-Be
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Dmitry	Feichtner-Kozlov	M	Unive
Conferences	Participant	Aalborg University, Denmark	07-apr-15	10-apr-15	Prof.	Dmitry	Feichtner-Kozlov	M	Unive
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Christian	Reinhardt	M	Techn
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Thomas	Wanner	M	Georg
Conferences	Speaker	Aalborg University, Denmark	07-apr-15	10-apr-15	Prof.	Thomas	Kahl	M	Unive
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Prof.	Thomas	Kahl	M	Unive
Conferences	Organiser	Bremen, Germany	15-jul-13	19-jul-13	Prof.	Dmitry	Feichtner-Kozlov	M	Unive
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Dmitry	Feichtner-Kozlov	M	Unive
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Javier	Arsuaga	M	San F
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Roberto	Barrio	M	Unive
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Prof.	María José	Jimenez	F	Unive
Conferences	Speaker	Sevilla, Spain	20-mar-13	22-mar-13	Dr.	Francisco	Escolano	M	
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	Diego	Mondéjar Ruiz	M	Unive
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	Lucía Fernández	Suarez	F	Institu
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Dr.	Paul André	Mellies	M	Unive
Conferences	Participant	Aalborg University, Denmark	07-apr-15	10-apr-15	Prof.	Eric	Goubault	M	

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Conferences	Organiser	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Prof.	Eric	Goubault	M	
Conferences	Organiser	Lyon - France	13-jan-14	14-feb-14	Prof.	Eric	Goubault	M	
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Prof.	Eric	Goubault	M	
Conferences	Speaker	Lyon - France	13-jan-14	14-feb-14	Mrs.	Assia	Mahboubi	F	
Conferences	Speaker	Lyon - France	13-jan-14	14-feb-14	Mr.	Nicolas	Tabareau	M	Ecole
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Prof.	Eric	Finster	M	
Conferences	Participant	Aalborg University, Denmark	07-apr-15	10-apr-15	Prof.	Eric	Finster	M	
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Jacques	Darné	M	
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Maxime	Lucas	M	Unive
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	François	Métayer	M	Unive
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Loïc	Paulevé	M	Unive
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Philippe	Saade	M	ICJ - U
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Giovanni Federico	Gronchi	M	Unive
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Dr.	Sefi	Ladkani	M	Unive
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Ms.	Paola	Magillo	F	Unive
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Carlo	Petronio	M	Unive
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	Giovanni	Petri	M	
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Andrea	Cesaro	M	
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Hiroe	Oka	F	Ryuko
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	My Ismail	Mamouni	M	
Conferences	Participant	Aalborg University, Denmark	07-apr-15	10-apr-15	Prof.	José Carlos	Gomez Larrañaga	M	
Conferences	Speaker	Aalborg University, Denmark	07-apr-15	10-apr-15	Dr.	Sergio	Rajsbaum	M	Unive
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Mr.	Fernando Andres	Benavides Agredo	M	
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Miss	Jacobine	Carstens	F	
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Klaudiusz	Wójcik	M	Jagiel
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Anna	Gierzkiewicz	F	Unive
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Waclaw	Marzantowicz	M	Adam
Conferences	Organiser	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Waclaw	Marzantowicz	M	Adam
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	Swiatoslaw	Gal	M	Unive
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Maciej	Capinski	M	AGH
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Wagner	Hubert	M	Jagiel
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Robert	Skiba	M	Nicola
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Piotr	Bartlomiejczyk	M	Unive

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Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Mr.	Wojciech	Lubawski	M	
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Stanislaw	Spiez	M	Unive
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	João	Pita Costa	M	
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	João	Pita Costa	M	
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Miguel	Abreu	M	Unive
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Leonor	Godinho	F	Institu
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Joao	Esteves	M	Unive
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	João Pimentel	Nunes	M	Unive
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Rade	Zivaljevic	M	Belgra
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Ms.	Ana	Velimirovic	F	Unive
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Alexey	Volovikov	M	
Conferences	Speaker	Aalborg University, Denmark	07-apr-15	10-apr-15	Prof.	Petr	Kuznetsov	M	
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Ran	Levi	M	
Conferences	Speaker	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Dr.	Emily	Burgunder	F	Unive
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Mr.	John	Huerta	M	
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Harker	Shaun	M	Rutge
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Thomas	Stephens	M	Georg
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Dan	Cohen	M	Louisia
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Yuli	Rudyak	M	Unive
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Alexander	Danis	M	Uppsala
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Mr.	Zakir	Deniz	M	Suley
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Dusko	Jojic	M	Unive
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Marcio	Gameiro	M	Unive
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Valery	Gaiko	M	Natio
Conferences	Participant	Aalborg University, Denmark	07-apr-15	10-apr-15	Mr.	Jan Felix	Senge	M	Unive
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Mr.	Jan Felix	Senge	M	Unive
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Jan Felix	Senge	M	Unive
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Frank	Weilandt	M	Jagiel
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Mr.	Frank	Weilandt	M	Jagiel
Conferences	Participant	Bremen, Germany	15-jul-13	19-jul-13	Mr.	Marek	Krcal	M	Charl
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Moritz	Firsching	M	FU Be
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Dr.	Daniel	Muellner	M	Stanf
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Mr.	Björn	Gohla	M	Unive

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Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Alexander	Wittig	M	Michi
Conferences	Participant	Aalborg University, Denmark	07-apr-15	10-apr-15	Dr.	Roman	Bruckner	M	Unive
Conferences	Speaker	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Ms.	Viktoriya	Ozornova	F	Unive
Conferences	Participant	Aalborg University, Denmark	07-apr-15	10-apr-15	Prof.	Iver	Ottosen	M	Aalbo
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Javier	Gómez-Serrano	M	ICMA
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Narcís	Miguel I Banos	M	Unive
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Mr.	Diego	Ruiz Mondéjar	M	Unive
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Marcos	Rodríguez	M	Centr
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Dr.	Rocio	Gonzalez Diaz	F	Unive
Conferences	Organiser	Sevilla, Spain	20-mar-13	22-mar-13	Dr.	Rocio	Gonzalez Diaz	F	Unive
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Mr.	Jonathan Vicente	Heras	M	Unive
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Rafael	Ortega	M	Unive
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	Luis	Ugarte	M	Unive
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Mr.	Luis Miguel	Anguas Márquez	M	Unive
Conferences	Organiser	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Lucile	Vandembroucq	F	Unive
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Lucile	Vandembroucq	F	Unive
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Prof.	Lucile	Vandembroucq	F	Unive
Conferences	Organiser	Lyon - France	13-jan-14	14-feb-14	Mr.	Patrick	Baillot	M	
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Yves	Guiraud	M	Unive
Conferences	Organiser	Lyon - France	13-jan-14	14-feb-14	Mr.	Yves	Guiraud	M	Unive
Conferences	Organiser	Lyon - France	13-jan-14	14-feb-14	Mr.	Philippe	Malbos	M	Unive
Conferences	Organiser	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Philippe	Malbos	M	Unive
Conferences	Speaker	Aalborg University, Denmark	07-apr-15	10-apr-15	Mr.	Philippe	Malbos	M	Unive
Conferences	Speaker	Lyon - France	13-jan-14	14-feb-14	Mrs.	Sylvie	Boldo	F	
Conferences	Speaker	Lyon - France	13-jan-14	14-feb-14	Mr.	Guillaume	Brunerie	M	Unive
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Dr.	Nicolas	Ninin	M	Ecole
Conferences	Participant	Aalborg University, Denmark	07-apr-15	10-apr-15	Dr.	Nicolas	Ninin	M	Ecole
Conferences	Participant	Aalborg University, Denmark	07-apr-15	10-apr-15	Dr.	Thomas	Nowak	M	Ecole
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Clément	Alleaume	M	Institu
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Dimitri	Ara	M	
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Christian	Ausoni	M	Unive
Conferences	Speaker	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Albert	Burroni	M	Unive
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Joan	Millès	M	Unive

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Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Jérémy	Nusa	M	Unive
Conferences	Speaker	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Prof.	Carlos	Simpson	M	Unive
Conferences	Speaker	Lyon - France	13-jan-14	14-feb-14	Dr.	Eric	Hoffbeck	M	Unive
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Dr.	Eric	Hoffbeck	M	Unive
Conferences	Organiser	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Prof.	Samuel	Mimram	M	
Conferences	Organiser	Lyon - France	13-jan-14	14-feb-14	Prof.	Samuel	Mimram	M	
Conferences	Speaker	Aalborg University, Denmark	07-apr-15	10-apr-15	Prof.	Samuel	Mimram	M	
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Mr.	Georges	Maltsiniotis	M	Unive
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Andras	Szucs	M	Eotvo
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Roy	Meshulam	M	
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Prof.	Roy	Meshulam	M	
Conferences	Participant	Bremen, Germany	15-jul-13	19-jul-13	Dr.	Catherine	Labruere	F	Unive
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Mr.	Aruni	Choudhary	M	
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Mauro	Spera	M	Unive
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Marco	Sansottera	M	Unive
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Gaetano	Zampieri	M	Unive
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Prof.	Francesca	Cagliari	F	Unive
Conferences	Participant	Bertinoro, Italy	28-maj-12	30-maj-12	Dr.	Luciano	Gualandri	M	Unive
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Kaname	Matsue	M	Tohok
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	Shizuo	Kaji	M	Yama
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Dai	Tamaki	M	
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Sang-Eon	Han	M	Chonl
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Sang-Eon	Han	M	Chonl
Conferences	Participant	Aalborg University, Denmark	07-apr-15	10-apr-15	Dr.	Deborah Olayide	Ajayi	F	Unive
Conferences	Organiser	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Marian	Mrozek	M	Jagiel
Conferences	Speaker	Aalborg University, Denmark	07-apr-15	10-apr-15	Prof.	Marian	Mrozek	M	Jagiel
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Aleksy	Tralle	M	Unive
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Aleksander	Czechowski	M	Jagiel
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Zbigniew	Galias	M	AGH U
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Tomasz	Kapela	M	Jagiel
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Stanislaw	Sedziwy	M	Jagiel
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Daniel	Wilczak	M	Jagiel
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Piotr	Zgliczynski	M	Jagiel

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Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Juda	Mateusz	M	Jagiel
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Tadeusz	Januszkiewicz	M	
Conferences	Participant	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	Mateusz	Juda	M	Jagiel
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Piotr	Sulkowski	M	Unive
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	Pedro	Lopes	M	Techn
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Ana Cristina	Casimiro Malheiro	F	New
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Gabriel Lopes	Cardoso	M	
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	Ana Maria	Porto Ferreira Da	F	Silva
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	António Manuel	Salgueiro	M	
Conferences	Participant	Lisbon, Portugal	04-feb-15	07-feb-15	Prof.	Mica	Stankovic	M	Unive
Conferences	Participant	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Ms.	Jovana	Obradovic	F	Unive
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Sergei	Pilyugin	M	St-Pet
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Dr.	Dmitriy	Morozov	M	
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Dmitriy	Morozov	M	
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Dmitrii	Todorov	M	Saint
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Roman N.	Karasev	M	
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Prof.	Graham	Ellis	M	Natio
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Graham	Ellis	M	Natio
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Pieter	Collins	M	Maas
Conferences	Speaker	Sevilla, Spain	20-mar-13	22-mar-13	Prof.	Herbert	Edelsbrunner	M	
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Prof.	Herbert	Edelsbrunner	M	
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Prof.	Herbert	Edelsbrunner	M	
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Jay	Mireles James	M	Rutge
Conferences	Participant	Bedlewo, Poland	24-jun-12	30-jun-12	Mr.	Frank	Sturm	M	Aubur
Conferences	Speaker	Bedlewo, Poland	24-jun-12	30-jun-12	Dr.	Rodrigo	Trevino	M	Corne
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	Anthea	Monod	F	Duke
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Prof.	Vin	De Silva	M	Clare
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Vin	De Silva	M	Clare
Conferences	Speaker	Bremen, Germany	15-jul-13	19-jul-13	Dr.	Sanjeevi	Krishnan	M	Unive
Conferences	Speaker	École Polytechnique, Palaiseau, France	25-maj-15	28-maj-15	Dr.	Sanjeevi	Krishnan	M	Unive
Conferences	Speaker	Aalborg University, Denmark	07-apr-15	10-apr-15	Dr.	Sanjeevi	Krishnan	M	Unive
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	Sanjeevi	Krishnan	M	Unive
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Washington	Mio	M	Florid

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Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Prof.	Monica	Nicolau	F	Stanf
Conferences	Speaker	Conference Center of IM PAN, Bedlewo, Poland	22-jul-13	27-jul-13	Dr.	Ismar	Volic	M	
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	Brittany Terese	Fasy	F	Tulan
Conferences	Speaker	Lisbon, Portugal	04-feb-15	07-feb-15	Dr.	Jose Gabriel	Carrasquel Vera	M	Unive
Exchange Grants	Host		04-nov-13	16-feb-14	Prof.	Herbert	Edelsbrunner	M	
Exchange Grants	Host		02-mar-15	03-jun-15	Prof.	Herbert	Edelsbrunner	M	
Exchange Grants	Recipient		04-nov-13	16-feb-14	Prof.	Graham	Ellis	M	Natio
Exchange Grants	Host		15-sep-14	04-jan-15	Prof.	Marian	Mrozek	M	Jagiel
Exchange Grants	Host		05-jan-15	23-feb-15	Prof.	Günter M.	Ziegler	M	Techn
Exchange Grants	Recipient		03-aug-12	28-aug-12	Dr.	Jacek	Szybowski	M	AGH U
Exchange Grants	Recipient		15-sep-14	04-jan-15	Mr.	Sameh	Mohamed	M	Ecole
Exchange Grants	Recipient		02-mar-15	03-jun-15	Dr.	Ziga	Virk	M	Unive
Exchange Grants	Recipient		30-okt-14	19-dec-14	Dr.	Barbara	Di Fabio	F	Unive
Exchange Grants	Recipient		05-jan-15	31-jan-15	Dr.	Barbara	Di Fabio	F	Unive
Exchange Grants	Recipient		05-jan-15	23-feb-15	Ms.	Mónica	Blanco	F	Unive
Exchange Grants	Host		30-okt-14	19-dec-14	Prof.	Neza	Mramor Kosta	F	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Prof.	Antonio	Giraldo	M	Unive
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Prof.	Ana María	Pacheco Martínez	F	Unive
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Prof.	Desamaparados	Fernández Ternero	F	Unive
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Dr.	Arturo	Aquino Martín	M	Unive
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Dr.	Ainhua	Berciano Alcaraz	F	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Dejan	Govc	M	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Dr.	Aleksandra	Franc	F	Unive
Schools	Organiser	Ljubljana, Slovenia	01-jul-13	05-jul-13	Dr.	Aleksandra	Franc	F	Unive
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Mr.	Dejan	Govc	M	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Ms.	Barbara	Ikica	F	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Marko	Lalovic	M	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Miha	Nedeljko	M	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Ms.	Jasna	Skrbec	F	
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Dr.	Matevz	Jekovec	M	Unive
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Dr.	Darko	Pevec	M	Unive
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Mr.	Martin	Strazar	M	Unive
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Dr.	Martin	Vuk	M	Unive

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Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Dr.	Semra	Pamuk	F	Middl
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Dr.	Petar	Pavešic	M	Unive
Schools	Organiser	Ljubljana, Slovenia	01-jul-13	05-jul-13	Dr.	Petar	Pavešic	M	Unive
Schools	Speaker	Ljubljana, Slovenia	01-jul-13	05-jul-13	Prof.	Bojan	Mohar	M	Unive
Schools	Organiser	Ljubljana, Slovenia	01-jul-13	05-jul-13	Prof.	Neza	Mramor Kosta	F	Unive
Schools	Speaker	Bologna, Italy	25-maj-12	26-maj-12	Prof.	Neza	Mramor Kosta	F	Unive
Schools	Organiser	Ljubljana, Slovenia	22-jun-15	27-jun-15	Prof.	Neza	Mramor Kosta	F	Unive
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Prof.	Jose Antonio	Vilches Alarcón	M	Unive
Schools	Speaker	Ljubljana, Slovenia	01-jul-13	05-jul-13	Prof.	Danica	Kragic	F	
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Prof.	Massimo	Ferri	M	Unive
Schools	Organiser	Bologna, Italy	25-maj-12	26-maj-12	Prof.	Massimo	Ferri	M	Unive
Schools	Speaker	Ljubljana, Slovenia	01-jul-13	05-jul-13	Prof.	Massimo	Ferri	M	Unive
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Mr.	Arnur	Nigmatov	M	
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Miss	Annalisa	Grossi	F	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Ms.	Alice	Patania	F	
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Mr.	Ricardo Danilo	Jadanza	M	Polite
Schools	Speaker	Bologna, Italy	25-maj-12	26-maj-12	Dr.	Alessandro	Bevilacqua	M	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Davide	Bolognini	M	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Davide	Bolognini	M	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Federico	Iuricich	M	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Mattia Giuseppe	Bergomi	M	Unive
Schools	Organiser	Bologna, Italy	25-maj-12	26-maj-12	Dr.	Andrea	Cerri	M	Unive
Schools	Organiser	Bologna, Italy	25-maj-12	26-maj-12	Dr.	Patrizio	Frosini	M	Univ.
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Ms.	Marija	Jelic	F	
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Dr.	Darian	Onchis	M	Unive
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Mr.	Mihail	Gaianu	M	West
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Prof.	João Miguel	Nogueira	M	Unive
Schools	Organiser	Bologna, Italy	25-maj-12	26-maj-12	Dr.	Barbara	Di Fabio	F	Unive
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Dr.	Guillaume	Damiand	M	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Dr.	Marek	Kaluba	M	Adam
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Mr.	Nicola	Quercioli	M	Unive
Schools	Organiser	Ljubljana, Slovenia	22-jun-15	27-jun-15	Dr.	Barbara	Di Fabio	F	Unive
Schools	Speaker	Ljubljana, Slovenia	01-jul-13	05-jul-13	Dr.	Florian	Pokorny	M	

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Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Mr.	Abhishek	Rathod	M	Indiar
Schools	Organiser	Bologna, Italy	25-maj-12	26-maj-12	Dr.	Claudia	Landi	F	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Ezio	Catelli	M	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Marco	Corbara	M	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Miss	Giulia	Corbucci	F	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Davide	Dobrilla	M	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Marcello	Prandi	M	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Lorenzo	Ruffoni	M	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Alessio	Savini	M	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Ms.	Francesca	Tripaldi	F	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Dr.	Maria Asuncion	Sastre	F	
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Dr.	Carmen	Escribano	F	
Schools	Speaker	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Dr.	Carles	Broto	M	Unive
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Mr.	Javier	Carnero Iglesias	M	Unive
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Dr.	Daniel	Díaz Pernil	M	Unive
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Mr.	Jose Manuel	Falces Sánchez	M	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Ms.	Hanife	Isal	F	Middl
Schools	Organiser	Ljubljana, Slovenia	22-jun-15	27-jun-15	Dr.	Gregor	Jerse	M	Unive
Schools	Organiser	Ljubljana, Slovenia	22-jun-15	27-jun-15	Prof.	Petar	Pavesic	M	Unive
Schools	Speaker	Ljubljana, Slovenia	22-jun-15	27-jun-15	Prof.	Andrej	Bauer	M	Unive
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Miss	Petra	Poklukar	F	Unive
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Miss	Spela	Poklukar	F	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Dr.	Miroslav	Rypka	M	
Schools	Speaker	Ljubljana, Slovenia	01-jul-13	05-jul-13	Dr.	Sara	Kalisnik	F	
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Ms.	Maja	Podbevsek	F	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Miha	Jejcic	M	Unive
Schools	Organiser	Ljubljana, Slovenia	01-jul-13	05-jul-13	Dr.	Gregor	Jerse	M	Unive
Schools	Speaker	Ljubljana, Slovenia	22-jun-15	27-jun-15	Prof.	Konstantin	Mischaikow	M	Rutge
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Miss	Marija	Djurdjevic	F	
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Ms.	Lidija	Comic	F	
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Piotr	Piekart	M	Jagiel
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Mr.	Luis	Rei	M	
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Dr.	Hubert	Wagner	M	Jagiel

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Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Dr.	Hubert	Wagner	M	Jagiel
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Dr.	Pawel	Dlotko	M	Jagiel
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Piotr	Brendel	M	Jagiel
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mrs.	Martina	Scolamiero	F	Polite
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Grzegorz Michal	Jablonski	M	Jagiel
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Grzegorz Michal	Jablonski	M	Jagiel
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Miss	Biserka	Cvetkovska	F	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Jan	Kralj	M	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Leon	Lampret	M	Unive
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Mr.	Leon	Lampret	M	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Chris	Palmer	M	Unive
Schools	Organiser	Ljubljana, Slovenia	01-jul-13	05-jul-13	Dr.	Primož	Skraba	M	
Schools	Organiser	Ljubljana, Slovenia	22-jun-15	27-jun-15	Dr.	Primož	Skraba	M	
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Dr.	Ziga	Virk	M	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Dr.	Ziga	Virk	M	Unive
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Dr.	Saso	Strle	M	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Domen	Soberl	M	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Domen	Soberl	M	Unive
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Dr.	Peter	Lendero	M	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Dr.	Peter	Lendero	M	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Dr.	Peter	Lendero	M	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Marc	Éthier	M	
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Mr.	Marc	Éthier	M	Jagiel
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Dr.	Jaka	Smrekar	M	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Dr.	Jaka	Smrekar	M	Unive
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Mr.	Blaz	Sovdat	M	Unive
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Mr.	Walid	Taamallah	M	Unive
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Dr.	Mehmetcik	Pamuk	M	Middl
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Ms.	Turkmen	Ornek	F	
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Nelson	Antonio Silva	M	Unive
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Mr.	Ibai	Basabe	M	Unive
Schools	Speaker	Ljubljana, Slovenia	22-jun-15	27-jun-15	Prof.	Dmitry	Feichtner-Kozlov	M	Unive
Schools	Speaker	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Mr.	Marcos	Ortega Hortas	M	Unive

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Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Mrs.	Cristina	Suarez Mejias	F	
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Mr.	Peña Santillana	Francisco Antonio	M	Unive
Schools	Organiser	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Dr.	Enrique	Macias Virgos	M	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Miss	Jacobine	Carstens	F	
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Gjorgji	Grgovski	M	Goce
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Mr.	Luca	Grementieri	M	
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Mr.	Andrea	Guidolin	M	Polite
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Filippo	Bergamasco	M	Ca' Fo
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Niccolò	Castronuovo	M	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Ms.	Benedetta	Franceschiello	F	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Gianluca	Pasini	M	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Alessandro	Perelli	M	Unive
Schools	Speaker	Ljubljana, Slovenia	01-jul-13	05-jul-13	Dr.	Bruno	Benedetti	M	Freie
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Dr.	Ulderico	Fugacci	M	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Ciro	Polizzi	M	Unive
Schools	Speaker	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Prof.	Hans G.	Feichtinger	M	Unive
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Dr.	Wolfgang	Birkfellner	M	Medic
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Dr.	Joao	Pita Costa	M	
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Dr.	Angel Francisco	Tenorio Villalon	M	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Dr.	Andrea	Villa	M	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Dr.	João	Pita Costa	M	
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Ms.	Alexandra	Moraru	F	
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Mai Hoang	Bien	M	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Dung	Duong	M	Unive
Schools	Speaker	Ljubljana, Slovenia	22-jun-15	27-jun-15	Prof.	Rade	Zivaljevic	M	Belgra
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Dr.	Chantal	Oberson Ausoni	F	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Luis	Haug	M	ETH Z
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Jonathan Vicente	Heras	M	Unive
Schools	Organiser	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Dr.	Pedro	Real	M	Unive
Schools	Speaker	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Dr.	Pedro	Real	M	Unive
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Dr.	Frank	Weilandt	M	Jagiel
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Mr.	Luis Miguel	Anguas Márquez	M	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Luis Miguel	Anguas Márquez	M	Unive

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Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Frank	Weilandt	M	Jagiel
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Frank	Weilandt	M	Jagiel
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Prof.	Dusko	Jojic	M	Univer
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Luyen	Le	M	Natio
Schools	Speaker	Ljubljana, Slovenia	22-jun-15	27-jun-15	Prof.	Blaz	Zupan	M	Univer
Schools	Speaker	Ljubljana, Slovenia	01-jul-13	05-jul-13	Prof.	Ivan	Bratko	M	Univer
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Dr.	Damir	Franetic	M	Univer
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Dr.	Damir	Franetic	M	Univer
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Ivo	List	M	Univer
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Luka	Stopar	M	Institu
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Dr.	Ales	Vavpetic	M	Univer
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Dr.	Ales	Vavpetic	M	Univer
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Jurij	Volcic	M	Univer
Schools	Speaker	Ljubljana, Slovenia	22-jun-15	27-jun-15	-	Marinka	Zitnik	F	Univer
Schools	Speaker	Ljubljana, Slovenia	01-jul-13	05-jul-13	-	Marinka	Zitnik	F	Univer
Schools	Speaker	Ljubljana, Slovenia	22-jun-15	27-jun-15	Dr.	Sara	Kalisnik Verovsek	F	
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Mr.	Declan Stewart	Mcpartlin	M	Univer
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Miss	Neza	Zager Korenjak	F	Univer
Schools	Speaker	Ljubljana, Slovenia	22-jun-15	27-jun-15	Ms.	Nela	Milosevic	F	Univer
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Dr.	Edoardo	Angeloni	M	Teram
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Ms.	Valentina	Baldassarre	F	Univer
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Federico	Greco	M	Univer
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Andrea	Guglielmi	M	Univer
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Marco	Castonovo	M	
Schools	Participant	Ljubljana, Slovenia	22-jun-15	27-jun-15	Mr.	Giulio	Lo Monaco	M	Alma
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Dr.	Luciano	Gualandri	M	Univer
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Prof.	Francesca	Cagliari	F	Univer
Schools	Speaker	Ljubljana, Slovenia	22-jun-15	27-jun-15	Dr.	Francesco	Vaccarino	M	Polite
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Mr.	Clement	Maria	M	
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Mrs.	Helena	Molina Abril	F	Univer
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Dr.	Ioanna	Necula	F	Univer
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Miguel	Maranon	M	Univer
Schools	Speaker	Bologna, Italy	25-maj-12	26-maj-12	Prof.	Marian	Mrozek	M	Jagiel

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Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Adam	Burchardt	M	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Mr.	Tomasz	Dwojak	M	Adam
Schools	Speaker	Ljubljana, Slovenia	22-jun-15	27-jun-15	Prof.	Lucile	Vandembroucq	F	Unive
Schools	Participant	Ljubljana, Slovenia	01-jul-13	05-jul-13	Dr.	Juda	Mateusz	M	Jagiel
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Dr.	Miguel A.	Gutierrez-Naranjo	M	Unive
Schools	Organiser	Ljubljana, Slovenia	01-jul-13	05-jul-13	Dr.	Sergio	Cabello	M	
Schools	Speaker	Bologna, Italy	25-maj-12	26-maj-12	Prof.	Herbert	Edelsbrunner	M	
Schools	Speaker	Ljubljana, Slovenia	01-jul-13	05-jul-13	Prof.	Jeff	Erickson	M	Unive
Schools	Participant	Bologna, Italy	25-maj-12	26-maj-12	Mr.	Hieu	Ha Van	M	Unive
Schools	Participant	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Mr.	Aaron Bryan	Adcock	M	Unive
Schools	Speaker	Chipiona (Cádiz) Spain	17-okt-11	18-okt-11	Prof.	Herbert	Edelsbrunner	M	
Short Visits	Host		02-maj-12	22-maj-12	Prof.	Herbert	Edelsbrunner	M	
Short Visits	Recipient		14-jan-13	18-jan-13	Dr.	Jose Gabriel	Carrasquel Vera	M	Unive
Short Visits	Host		05-jul-15	11-jul-15	Prof.	Herbert	Edelsbrunner	M	
Short Visits	Host		09-mar-15	23-mar-15	Prof.	Herbert	Edelsbrunner	M	
Short Visits	Host		13-jan-14	17-jan-14	Prof.	Herbert	Edelsbrunner	M	
Short Visits	Host		02-maj-13	16-maj-13	Prof.	Graham	Ellis	M	Natio
Short Visits	Recipient		25-sep-11	08-okt-11	Dr.	Juda	Mateusz	M	Jagiel
Short Visits	Host		25-feb-13	01-mar-13	Prof.	Marian	Mrozek	M	Jagiel
Short Visits	Host		13-maj-15	17-maj-15	Prof.	Marian	Mrozek	M	Jagiel
Short Visits	Host		25-maj-14	31-maj-14	Prof.	Lucile	Vandembroucq	F	Unive
Short Visits	Recipient		05-dec-13	12-dec-13	Prof.	Lucile	Vandembroucq	F	Unive
Short Visits	Host		14-jan-13	18-jan-13	Prof.	Lucile	Vandembroucq	F	Unive
Short Visits	Host		13-jun-12	21-jun-12	Prof.	Roy	Meshulam	M	
Short Visits	Recipient		09-sep-12	14-sep-12	Prof.	Roy	Meshulam	M	
Short Visits	Host		01-jun-13	11-jun-13	Prof.	Roy	Meshulam	M	
Short Visits	Host		21-jun-15	06-jul-15	Dr.	Noel	O'Connor	M	Dubli
Short Visits	Host		09-mar-14	15-mar-14	Prof.	Daniel	Tanré	M	Unive
Short Visits	Host		07-jul-13	21-jul-13	Dr.	Pedro	Real	M	Unive
Short Visits	Recipient		10-feb-14	14-feb-14	Dr.	Jens	Kasten	M	Leipzi
Short Visits	Recipient		05-jul-15	11-jul-15	Prof.	Rade	Zivaljevic	M	Belgra
Short Visits	Host		18-maj-12	21-maj-12	Dr.	Jacek	Szybowski	M	AGH
Short Visits	Recipient		17-jun-13	24-jun-13	Dr.	Jacek	Szybowski	M	AGH

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Short Visits	Recipient		08-sep-13	21-sep-13	Dr.	Enrique	Macias Virgos	M	Unive
Short Visits	Recipient		21-jun-15	06-jul-15	Prof.	Maria José	Jimenez	F	Unive
Short Visits	Host		13-feb-12	19-feb-12	Prof.	Eric	Goubault	M	
Short Visits	Host		11-jun-13	14-jun-13	Prof.	Eric	Goubault	M	
Short Visits	Host		11-jun-13	14-jun-13	Prof.	Eric	Goubault	M	
Short Visits	Recipient		30-jun-15	04-jul-15	Mr.	Marc	Éthier	M	Jagiel
Short Visits	Host		25-sep-11	08-okt-11	Prof.	Martin	Rausen	M	Aalbo
Short Visits	Recipient		13-jan-14	17-jan-14	Dr.	David	Guenther	M	Telec
Short Visits	Recipient		22-jan-13	25-jan-13	Prof.	Martin	Rausen	M	Aalbo
Short Visits	Host		15-jan-12	21-jan-12	Prof.	Martin	Rausen	M	Aalbo
Short Visits	Recipient		11-jun-13	14-jun-13	Prof.	Martin	Rausen	M	Aalbo
Short Visits	Recipient		25-aug-14	28-aug-14	Prof.	Martin	Rausen	M	Aalbo
Short Visits	Host		06-apr-15	18-apr-15	Prof.	Martin	Rausen	M	Aalbo
Short Visits	Recipient		04-maj-13	11-maj-13	Mr.	Grzegorz Michal	Jablonski	M	Jagiel
Short Visits	Recipient		01-apr-14	12-apr-14	Mr.	Grzegorz Michal	Jablonski	M	Jagiel
Short Visits	Recipient		02-maj-12	22-maj-12	Mr.	Grzegorz Michal	Jablonski	M	Jagiel
Short Visits	Recipient		13-maj-15	17-maj-15	Dr.	Pawel	Pilarczyk	M	
Short Visits	Recipient		13-jun-12	21-jun-12	Prof.	Michael	Farber	M	Unive
Short Visits	Recipient		13-feb-12	19-feb-12	Prof.	Michael	Farber	M	Unive
Short Visits	Host		09-sep-12	14-sep-12	Prof.	Michael	Farber	M	Unive
Short Visits	Recipient		01-jun-13	11-jun-13	Prof.	Michael	Farber	M	Unive
Short Visits	Host		05-dec-13	12-dec-13	Prof.	Michael	Farber	M	Unive
Short Visits	Recipient		25-maj-14	31-maj-14	Prof.	Michael	Farber	M	Unive
Short Visits	Recipient		09-sep-13	15-sep-13	Dr.	Gregor	Jerse	M	Unive
Short Visits	Host		11-jan-15	16-jan-15	Prof.	Wojciech	Chacholski	M	KTH R
Short Visits	Recipient		11-jun-13	14-jun-13	Prof.	Lisbeth	Fajstrup	F	Aalbo
Short Visits	Host		16-nov-14	27-nov-14	Prof.	Lisbeth	Fajstrup	F	Aalbo
Short Visits	Recipient		25-aug-14	28-aug-14	Prof.	Lisbeth	Fajstrup	F	Aalbo
Short Visits	Recipient		02-maj-13	16-maj-13	Mr.	Francisco	Belchi Guillamon	M	Unive
Short Visits	Host		25-aug-14	28-aug-14	Dr.	Krzysztof	Ziemianski	M	Unive
Short Visits	Host		25-aug-14	28-aug-14	Dr.	Krzysztof	Ziemianski	M	Unive
Short Visits	Recipient		15-jan-12	21-jan-12	Dr.	Krzysztof	Ziemianski	M	Unive
Short Visits	Host		22-jan-13	25-jan-13	Dr.	Krzysztof	Ziemianski	M	Unive

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Short Visits	Recipient		06-apr-15	18-apr-15	Mr.	Jérémy	Dubut	M	
Short Visits	Recipient		11-jan-15	16-jan-15	Dr.	Claudia	Landi	F	Unive
Short Visits	Host		21-jul-14	01-aug-14	Dr.	Claudia	Landi	F	Unive
Short Visits	Recipient		05-maj-13	15-maj-13	Dr.	Armindo	Costa	M	Unive
Short Visits	Recipient		14-okt-12	27-okt-12	Dr.	Armindo	Costa	M	Unive
Short Visits	Recipient		09-mar-15	23-mar-15	Dr.	Vitaliy	Kurlin	M	Durha
Short Visits	Host		04-maj-13	11-maj-13	Dr.	Patrizio	Frosini	M	Univ.
Short Visits	Host		30-jun-15	04-jul-15	Dr.	Patrizio	Frosini	M	Univ.
Short Visits	Host		24-jul-14	24-jul-14	Prof.	Massimo	Ferri	M	Unive
Short Visits	Host		01-apr-14	12-apr-14	Dr.	Patrizio	Frosini	M	Univ.
Short Visits	Recipient		09-mar-14	15-mar-14	Dr.	María José	Pereira-Sáez	F	Unive
Short Visits	Recipient		16-nov-14	27-nov-14	Prof.	Neza	Mramor Kosta	F	Unive
Short Visits	Recipient		09-sep-13	15-sep-13	Prof.	Neza	Mramor Kosta	F	Unive
Short Visits	Host		14-okt-12	27-okt-12	Prof.	Thomas	Kappeler	M	Unive
Short Visits	Host		05-maj-13	15-maj-13	Prof.	Thomas	Kappeler	M	Unive
Short Visits	Host		09-sep-13	15-sep-13	Prof.	Jose Antonio	Vilches Alarcón	M	Unive
Short Visits	Host		09-sep-13	15-sep-13	Prof.	Jose Antonio	Vilches Alarcón	M	Unive
Short Visits	Host		08-sep-13	21-sep-13	Prof.	Dietmar	Kröner	M	
Short Visits	Recipient		25-feb-13	01-mar-13	Dr.	Jan	Reininghaus	M	Institu
Short Visits	Host		10-feb-14	14-feb-14	Dr.	Jan	Reininghaus	M	Institu
Steering Committee	Member		09-jul-11	08-jul-15	Prof.	Thomas	Kappeler	M	Unive
Steering Committee	Member		09-jul-11	08-jul-15	Prof.	Neza	Mramor Kosta	F	Unive
Steering Committee	Member		09-jul-11	08-jul-15	Prof.	Massimo	Ferri	M	Unive
Steering Committee	Member		09-jul-11	08-jul-15	Prof.	Michael	Farber	M	Unive
Steering Committee	Chair		09-jul-11	08-jul-15	Prof.	Martin	Rausen	M	Aalbo
Steering Committee	Member		09-jul-11	08-jul-15	Prof.	Dmitry	Feichtner-Kozlov	M	Unive
Steering Committee	Member		09-jul-11	08-jul-15	Prof.	Eric	Goubault	M	
Steering Committee	Member		09-jul-11	08-jul-15	Prof.	Aniceto	Murillo	M	Unive
Steering Committee	Observer		09-jul-11	08-jul-15	Prof.	Roy	Meshulam	M	
Steering Committee	Member		09-jul-11	08-jul-15	Prof.	Lucile	Vandembroucq	F	Unive
Steering Committee	Member		09-jul-11	08-jul-15	Prof.	Marian	Mrozek	M	Jagiel
Steering Committee	Member		09-jul-11	08-jul-15	Prof.	Graham	Ellis	M	Natio
Steering Committee	Member		09-jul-11	08-jul-15	Prof.	Herbert	Edelsbrunner	M	

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Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Dr.	Sergio	Cabello	M	
Workshops	Organiser	IST Austria	06-jul-15	10-jul-15	Prof.	Herbert	Edelsbrunner	M	
Workshops	Participant	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Prof.	Jonathan	Dawes	M	Unive
Workshops	Speaker	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Prof.	Graham	Ellis	M	Natio
Workshops	Participant	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Prof.	Luc	Lemaire	M	Unive
Workshops	Speaker	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Dr.	Andrew	Tonks	M	Unive
Workshops	Organiser	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Prof.	Graham	Ellis	M	Natio
Workshops	Speaker	Aalborg University. Denmark	05-sep-12	07-sep-12	Prof.	Marian	Mrozek	M	Jagiel
Workshops	Speaker	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Prof.	Marian	Mrozek	M	Jagiel
Workshops	Speaker	Aalborg University. Denmark	05-sep-12	07-sep-12	Dr.	Juda	Mateusz	M	Jagiel
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Dr.	Mateusz	Juda	M	Jagiel
Workshops	Participant	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Dr.	Mateusz	Juda	M	Jagiel
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Bazyli	Klockiewicz	M	Adam
Workshops	Participant	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Prof.	Irene	Brito	F	Unive
Workshops	Participant	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Prof.	Eugenia Cesar	De Sa	F	Unive
Workshops	Speaker	Aalborg University. Denmark	05-sep-12	07-sep-12	Prof.	Radu	Mardare	M	Aalbo
Workshops	Participant	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Prof.	Malte	Milatz	M	ETH Z
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Dr.	Michael	Kerber	M	
Workshops	Speaker	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Dr.	Jose Gabriel	Carrasquel Vera	M	Unive
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Jose Gabriel	Carrasquel Vera	M	Unive
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Prof.	Alexander	Dranishnikov	M	Unive
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Mose	Wintner	M	Unive
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Prof.	Sergey	Yuzvinsky	M	Unive
Workshops	Speaker	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Dr.	Sanjeevi	Krishnan	M	Unive
Workshops	Speaker	6ECM Krakow, Poland	03-jul-12	03-jul-12	Prof.	Lucile	Vandembroucq	F	Unive
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Monica	Blanco Gomez	F	Unive
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Urtzi	Buijs	M	Unive
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Cristina	Costoya	F	Unive
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Antonio	Viruel	M	Unive
Workshops	Participant	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Prof.	Lucia	Fernández-Suárez	F	Institu
Workshops	Speaker	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Dr.	Alban	Quadrat	M	
Workshops	Speaker	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Prof.	Tornike	Kadeishvili	M	Tbilisi
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Prof.	Roy	Meshulam	M	

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Workshops	Participant	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Dr.	Ashis	Mandal	M	
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Prof.	Lucile	Vandembroucq	F	Unive
Workshops	Organiser	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Prof.	Lucile	Vandembroucq	F	Unive
Workshops	Speaker	Aalborg University, Denmark	05-sep-12	07-sep-12	Prof.	Samuel	Mimram	M	
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Mr.	Abraham	Martin Del Campo	M	Texas
Workshops	Organiser	Malaga	03-jul-13	05-jul-13	Prof.	Aniceto	Murillo	M	Unive
Workshops	Organiser	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Prof.	Aniceto	Murillo	M	Unive
Workshops	Speaker	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Mr.	Jonathan Vicente	Heras	M	Unive
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Rocio	Gonzalez Diaz	F	Unive
Workshops	Speaker	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Mr.	Sebastian	Posur	M	RWTH
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Frank	Weilandt	M	Jagiel
Workshops	Speaker	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Prof.	Martin	Markl	M	
Workshops	Organiser	Malaga	03-jul-13	05-jul-13	Dr.	Pedro	Real	M	Unive
Workshops	Participant	Aalborg University, Denmark	05-sep-12	07-sep-12	Prof.	Iver	Ottosen	M	Aalbo
Workshops	Organiser	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Dr.	Pedro	Real	M	Unive
Workshops	Speaker	IST Austria	06-jul-15	10-jul-15	Dr.	Ulrich	Wagner	M	
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Ayse	Borat	F	Zirve
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Mr.	Marek	Krcal	M	
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Mr.	Marek	Krcal	M	
Workshops	Participant	Aalborg University, Denmark	05-sep-12	07-sep-12	Mr.	Frank	Weilandt	M	Jagiel
Workshops	Speaker	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Mr.	Kiko	Belchi	M	Unive
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Antonio	Garvin	M	Unive
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Mr.	Salvador	Sierra Murillo	M	Freie
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Prof.	Maria José	Jimenez	F	Unive
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Enrique	Macias Virgos	M	Unive
Workshops	Speaker	Aalborg University, Denmark	05-sep-12	07-sep-12	Mr.	Emmanuel	Haucourt	M	
Workshops	Speaker	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Prof.	Francis	Sergeraert	M	Unive
Workshops	Speaker	IST Austria	06-jul-15	10-jul-15	Prof.	Janos	Pach	M	Ecole
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Prof.	José Carlos	Gomez Larrañaga	M	
Workshops	Participant	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Prof.	Rita	Fioresi	F	Unive
Workshops	Speaker	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Dr.	Domenico	Fiorenza	M	Unive
Workshops	Organiser	6ECM Krakow, Poland	03-jul-12	03-jul-12	Prof.	Martin	Rausen	M	Aalbo
Workshops	Speaker	6ECM Krakow, Poland	03-jul-12	03-jul-12	Prof.	Martin	Rausen	M	Aalbo

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Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Prof.	Martin	Rauszen	M	Aalbo
Workshops	Participant	Aalborg University, Denmark	05-sep-12	07-sep-12	Prof.	Martin	Rauszen	M	Aalbo
Workshops	Speaker	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Prof.	Martin	Rauszen	M	Aalbo
Workshops	Speaker	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Mr.	Sebastian	Gutsch	M	RWTH
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Mr.	Florian	Frick	M	Techn
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Mr.	Dirk	Schütz	M	Unive
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Dr.	Mirko	Klukas	M	Unive
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Prof.	Dmitry	Feichtner-Kozlov	M	Unive
Workshops	Speaker	6ECM Krakow, Poland	03-jul-12	03-jul-12	Prof.	Dmitry	Feichtner-Kozlov	M	Unive
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Mr.	Ibai	Basabe	M	Unive
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Mr.	Marc	Éthier	M	Jagiel
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Weiwei	Pan	F	St. Ma
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Dr.	Radoslav	Fulek	M	
Workshops	Participant	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Mr.	Marek	Filakovsk	M	Maza
Workshops	Participant	Aalborg University, Denmark	05-sep-12	07-sep-12	Mr.	Domen	Soberl	M	Unive
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Dr.	Ziga	Virk	M	Unive
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Prof.	Rade	Zivaljevic	M	Belgra
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Prof.	Rade	Zivaljevic	M	Belgra
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Dr.	Arseniy	Akopyan	M	
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Mr.	Anton	Nikitenko	M	
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Prof.	Robert	Ghrist	M	Unive
Workshops	Participant	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Prof.	Ethan	Berkove	M	Lafaye
Workshops	Participant	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Prof.	Ana	Pereira Do Vale	F	Unive
Workshops	Participant	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Dr.	Ana Cristina	Ferreira	F	Unive
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Grzegorz Michal	Adamaszek	M	
Workshops	Organiser	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Prof.	Michael	Farber	M	Unive
Workshops	Participant	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Prof.	Roger	Picken	M	Unive
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Prof.	Mark	Grant	M	Newco
Workshops	Speaker	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Prof.	Ronald	Brown	M	Unive
Workshops	Speaker	Malaga	03-jul-13	05-jul-13	Dr.	Pawel	Dotko	M	Unive
Workshops	Participant	Aalborg University, Denmark	05-sep-12	07-sep-12	Mr.	Piotr	Brendel	M	Jagiel
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Dr.	Pawel	Dotko	M	
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Hubert	Wagner	M	Jagiel

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Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Dr.	Hubert	Wagner	M	
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Mr.	Grzegorz Michal	Jablonski	M	Jagiel
Workshops	Speaker	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Dr.	Pawel	Pilarczyk	M	
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Dr.	Pawel	Pilarczyk	M	
Workshops	Speaker	Aalborg University. Denmark	05-sep-12	07-sep-12	Mr.	Grzegorz Michal	Jablonski	M	Jagiel
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Barbara	Gutierrez	F	
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Prof.	Jesus	Gonzalez	M	
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Dr.	Michael	Lesnick	M	Institu
Workshops	Participant	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Dr.	Antonio	Rieser	M	Techn
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Antonio	Rieser	M	Techn
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Prof.	Boris	Goldfarb	M	Unive
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Mr.	Florian	Pausinger	M	
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Dr.	Paul	Bendich	M	Duke
Workshops	Participant	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Mr.	Soutrik	Chowdhury	M	Trinity
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Salman	Parsa	M	Duke
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Dr.	Salman	Parsa	M	
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Barbara	Di Fabio	F	Unive
Workshops	Participant	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Dr.	Barbara	Di Fabio	F	Unive
Workshops	Speaker	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Prof.	Vladimir	Dotsenko	M	Trinity
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Mr.	Abhishek	Rathod	M	Indian
Workshops	Speaker	IST Austria	06-jul-15	10-jul-15	Prof.	Tamal	Dey	M	The C
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Mr.	Jérémy	Cochoy	M	
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Dr.	Arnaud	De Mesmay	M	
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Giorgi	Khimshiasvili	M	
Workshops	Speaker	Aalborg University. Denmark	05-sep-12	07-sep-12	Dr.	Krzysztof	Ziemianski	M	Unive
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Marek	Kaluba	M	Adam
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Simona	Paoli	F	Unive
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Dr.	Claudia	Landi	F	Unive
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Dr.	Barbara	Di Fabio	F	Unive
Workshops	Speaker	Malaga	03-jul-13	05-jul-13	Mr.	Francisco	Belchi Guillamon	M	Unive
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Mr.	Francisco	Belchi Guillamon	M	Unive
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Prof.	Francisco	Romero Ruiz Del Portal	M	Unive
Workshops	Speaker	Malaga	03-jul-13	05-jul-13	Prof.	Victor	Alvarez	M	Unive

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Workshops	Speaker	Malaga	03-jul-13	05-jul-13	Prof.	Ana	Romero	F	Unive
Workshops	Speaker	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Prof.	Ana	Romero	F	Unive
Workshops	Speaker	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Prof.	Ana	Romero	F	Unive
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Prof.	Lisbeth	Fajstrup	F	Aalbo
Workshops	Organiser	Aalborg University. Denmark	05-sep-12	07-sep-12	Prof.	Lisbeth	Fajstrup	F	Aalbo
Workshops	Speaker	Aalborg University. Denmark	05-sep-12	07-sep-12	Prof.	Lisbeth	Fajstrup	F	Aalbo
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Prof.	Petar	Pavesic	M	Unive
Workshops	Organiser	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Prof.	Thomas	Kahl	M	
Workshops	Participant	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Prof.	Friedrich	Wagemann	M	Unive
Workshops	Participant	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Dr.	Martin	Bies	M	Unive
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Albert	Haase	M	Freie
Workshops	Speaker	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Dr.	Martin	Doubek	M	Unive
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Mr.	Enrico	Manfredi	M	Unive
Workshops	Speaker	Malaga	03-jul-13	05-jul-13	Dr.	Patrizio	Frosini	M	Univ.
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Prof.	Massimo	Ferri	M	Unive
Workshops	Speaker	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Prof.	Massimo	Ferri	M	Unive
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Mr.	Kristof	Huszar	M	
Workshops	Participant	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Dr.	David	Quinn	M	Aberc
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	María José	Pereira-Sáez	F	Unive
Workshops	Speaker	Malaga	03-jul-13	05-jul-13	Prof.	Ana María	Pacheco Martínez	F	Unive
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Jose Manuel	Garcia Calcines	M	Unive
Workshops	Speaker	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Dr.	Jose Manuel	Garcia Calcines	M	Unive
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Alberto	Gavira	M	Unive
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Dr.	Steve Y.	Oudot	M	
Workshops	Speaker	6ECM Krakow, Poland	03-jul-12	03-jul-12	Dr.	Patrizio	Frosini	M	Univ.
Workshops	Participant	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Dr.	Michele	Cirafici	M	UTL
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Mr.	Magnus Bakke	Botan	M	Unive
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Mr.	Gard	Spreemann	M	Norw
Workshops	Speaker	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Prof.	Marek	Golasinski	M	Casim
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Prof.	Marek	Golasinski	M	Casim
Workshops	Speaker	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Prof.	Alexander	Berglund	M	Stock
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Prof.	Neza	Mramor Kosta	F	Unive
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Dr.	Ulrich	Bauer	M	TU M

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Workshops	Participant	Aalborg University, Denmark	05-sep-12	07-sep-12	Mr.	Tobias	Heindel	M	CEA L
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Ms.	Mabel	Iglesias Ham	F	
Workshops	Speaker	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Prof.	Lukas	Vokrinek	M	Masa
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Prof.	Jose Antonio	Vilches Alarcón	M	Unive
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Prof.	Antonio	Giraldo	M	Unive
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Prof.	Pavle	Blagojevic	M	FU Be
Workshops	Organiser	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Prof.	Mohamed	Barakat	M	Unive
Workshops	Speaker	NUI Galway, Galway, Ireland	01-dec-14	05-dec-14	Dr.	Thomas	Huetteman	M	Quee
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Manuel	Amann	M	KIT
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Werner	Thumann	M	Karlsru
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Dr.	Vitaliy	Kurlin	M	Durha
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Vitaliy	Kurlin	M	Durha
Workshops	Speaker	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Prof.	Matthew	Kahle	M	The C
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Prof.	Matthew	Kahle	M	The C
Workshops	Participant	IST Austria	06-jul-15	10-jul-15	Mr.	Isaac	Mabillard	M	
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Dr.	Armindo	Costa	M	Unive
Workshops	Speaker	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Dr.	Armindo	Costa	M	
Workshops	Participant	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Prof.	João Miguel	Nogueira	M	Unive
Workshops	Participant	AMS-EMS-SPM joint meeting, Porto, Portugal	10-jun-15	13-jun-15	Prof.	Nelson	Martins-Ferreira	M	Polyte
Workshops	Speaker	IST Austria	06-jul-15	10-jul-15	Mr.	Iskander	Taimanov	M	Novos
Workshops	Participant	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Mr.	Greg	Malen	M	Ohio
Workshops	Speaker	CIEM Castro Urdiales, Spain	26-jun-14	04-jul-14	Prof.	Eric	Babson	M	

ESF-PESC Networking Programme

Applied and Computational Algebraic Topology



DIGITAL INFRASTRUCTURES

September 2015

Apart from the website at the [ESF](#), ACAT established its own [website](#) hosted by the French team at École polytechnique (Palaiseau).

First of all, it archives the ten ACAT Newsletters broadcasted during the duration of the programme and it informs the worldwide community in applied and computational topology about recent and upcoming events. The steering committee has recommended continuing this website; in the future, it will be hosted at the University of Bremen.

The Department of Mathematical Sciences at Aalborg University has established a mailing list with interested researchers, first of all for the distribution of ACAT Newsletters. The list has also been in use for conference announcements and occasionally also for advertisements of positions. It was decided to maintain the mailing list for these purposes.

Appendix g: Publications

The list of publications below is the result of a “call” to ACAT collaborators on the mailing list; it is certainly not complete. Publications cover a wide range, from prestigious academic journals in pure mathematics to proceedings for conferences in e.g. vision and robotics.

Almost all publications have been peer-reviewed; a number of them are still on their way through the refereeing system. Only when explicitly mentioned by the collaborator, we inserted “ESF support acknowledged”.

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ESF-PESC Networking Programme

Applied and Computational Algebraic Topology



Testimonials from several steering committee members

September 2015

M. Farber (UK): The ACAT was very successful as a RNP. We had a number of amazing opportunities to meet our colleagues from other European countries and collaborate with them. The ACAT boosted our research outcomes and broadened our views on potential applications of our research in other areas of mathematics and in industry.

É. Goubault (FR): I would like to stress that this network has been the most interesting and influential network I have participated in, gathering excellent people, and bringing together lots of interesting ideas.

H. Edelsbrunner (AT): The beginning of the research network project coincided with my move from the US to Europe, and I was glad to meet -- through it -- many like-minded mathematicians and computer scientists in Europe. The ACAT project helped form a community in computational algebraic topology that is not second to a similar community in the US, which is where the field originally started. The influence of this project will be felt for many years and contribute to Europe's competitiveness in academic and industrial contexts.

R. Meshulam (IL): In my opinion the ESF network on Applied and Computational Algebraic Topology (ACAT) proved to be an extremely fruitful initiative. ACAT activities were usually centered around one major annual conference that addressed a variety of aspects of applied topology, and in particular the three core subjects of ACAT - Computational topology and persistence homology, Algebraic topology in theoretical computer science and Stochastic topology. I participated in three of the major conferences (Zurich, Bremen and Castro Urdiales) and in some of the other more specialized meetings, and all proved to be a great success both by providing in depth overviews of the diverse aspects of the area and by facilitating cooperation between different groups. Indeed, as a result of the ACAT network activities I now have joint research projects with Michael Farber and with Martin Raussen as well as a joint German-Israeli Foundation grant with Dmitry Feichtner-Kozlov and Eva Feichtner.

N. Mramor-Kosta (SI): In the last four year since ACAT was formed computational topology has evolved into a promising research field in Slovenia. To a big extent this is due to ACAT, in particular to the two summers school that we were able to organize in Ljubljana thanks to ESF funding, the contacts that we now have through ACAT all over Europe and beyond, and the financing possibilities for short and long term visits to and from Ljubljana it has opened up for us. The range of interests in computational topology in Slovenia goes from discrete Morse theory and its connections to algebra, geometry and dynamics, to persistence, topological data analysis and topological complexity.

For me personally, ACAT has given me the possibility to connect with the growing research community in

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the field and to keep up to date with new results and ideas. As a result we have been able to design an attractive master's course in computational topology where the number of students has grown from 8 to 28 in the last three years. I suddenly have a number of undergraduate, masters and doctoral students working in computational topology with topics ranging from topological analysis of weather data, across applications to text mining and bioinformatics, to theory and algorithms in discrete Morse theory. ACAT has brought me as well as my students into an extremely attractive and lively field with interesting problems and challenges and many interested people to talk to and work with.

M. Mrozek (PL): I think that ACAT did great job in what it was intended for: strengthening and enlarging the network of European researchers working in computational topology or applying the methods of algebraic topology. I think it was particularly important for younger members of our Krakow group who benefited a lot from exchange grants and conference support... Most of the benefits are still ahead of us: relations building and progress is much slower in case of mathematics than in other sciences.

L. Vandembroucq (PT): At the personal level, I benefited a lot from the programme. In particular, my participation in conferences and exchange activities has permitted me to develop new collaborations which are very interesting for me. I think that the programme contributed a lot to develop contacts and collaborations within and among the different groups and, in particular, in the group working on Topological Robotics.

At the national level, the programme has permitted to meet the colleagues from Portuguese institutions who are interested in Applied Algebraic Topology. Some of them participated in several ACAT activities abroad and most of them participated in both ACAT events in Portugal (Lisbon and Porto ACAT meetings). These two meetings also permitted to catch the attention of other Portuguese mathematicians to the ACAT themes.