

**ESF PESC Research Networking Programme**  
**Applied and Computational Algebraic Topology (ACAT)**  
**Final Evaluation**

The main goal of ACAT has been to create a community of European researchers in applied and computational algebraic topology.

To fulfil this objective, ACAT has supported many activities:

- 18 conferences and workshops and 5 schools;
- 6 exchange grants and 41 short visits;
- a number of joint publications of the researchers in the different nodes.

We should report that the attendance to these conferences and schools have been very high. Also the program of short visits and exchanges have been really productive.

The world's leading scientists in the field are based in the USA, so the European members of ACAT foster collaborations with the USA partners, participating in relevant activities in the IMA Thematic Year on Scientific and Engineering Applications of Algebraic Topology 2013-14 at the University of Minnesota. Some members of ACAT have also taken part in a project Topological Complex Systems (7th Framework Program) and a Russian megaproject Discrete and Computational Geometry, just looking for applications. These activities have helped to develop the field in Europe.

The most important decisions of ACAT have been managed by the Steering Committee, but they also has created a grant committee. This is the usual way to handle such a network. The funds have been handled in a reasonable way, practically following the initial plans.

The network has produced a brochure in 2012 that has been widely distributed; in addition, a very nice website has been created, including a lot of information on the activities and publications of ACAT members; the website also includes links to the Newsletter produced by ACAT.

The list of publications shows 177 items, but not all of them acknowledges the support by ESF.

In conclusion, not only the results obtained by the participants are quite impressive, but also some interesting follow-ups are in march to guarantee some continuity to the project. For instance, it is planned the launching of a Journal of Applied and Computational Topology; ACAT collaborators will participate in the ICERM programme Topology in motion in Brown university (fall 2016); also a two-week conference on the Hausdorff Institute Research for Mathematics in Bonn is on the agenda for 2017; and some networks are being created.

Rapporteur

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