

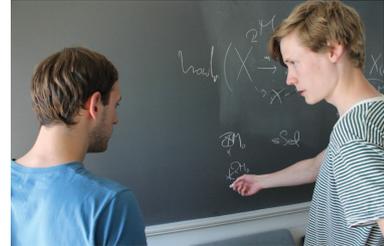
Centre for Symmetry and Deformation

Department of Mathematical Sciences, University of Copenhagen



CENTER HIGHLIGHTS 2013

The year 2013 was an eventful one, with new research results and an exceptional amount of workshop activity. The initial group of PhD students began to graduate in numbers, and a fresh batch of fall students and postdocs arrived in their place, marking a change for the center from a start-up venture to an established entity.



ACTIVITIES. The center hosted 5 successful workshops and 10 masterclasses in 2013, on topics ranging from string topology to ergodic theory and von Neumann algebras; the 214 research visitors to the center was an all-time high. A lot of activity was concentrated in the summer teaching break, which many international experts once again chose to spend at the center. The fall activity was centered around symbolic dynamical systems, with **Boyle** as our distinguished visiting professor.



RESEARCH. A record-breaking 69 new preprints appeared in 2013 in our report series **CPH-SYM-DNRF92** on **arXiv.org**, with exciting results across our spectrum of research. In homotopical group theory, **Henke** gave a characterization of saturated fusion systems over abelian 2-groups, resolving a conjecture of Kühlshammer–Navarro–Sambale–Tiep. In symmetry of manifolds, Berglund–**Madsen** discovered that all unstable rational homology groups of outer automorphism groups of free groups sit inside the stable rational cohomology of homotopy automorphisms of certain high dimensional manifolds. And in non-commutative geometry, Monod–Kellerhals–**Rørdam** provided a range of new characterisations of supra-menenable groups. Several of the results reported last year were meanwhile accepted in top journals, including *Invent. Math.*, *Acta Math.*, and *Duke Math. J.* Our leadership position was again recognized internationally in that **Haagerup** received one of only 277 honorary doctorates awarded by China the last 30 years.



EDUCATION AND OUTREACH. We held 16 graduate courses and 2 reading seminars in 2013. Our outreach activities featured targeted talent-nurturing, such as mentoring the Georg Mohr Competition and the Danish team in the International Math Olympiad, as well as broader outreach activities such as a stand at the Copenhagen Culture Night. Our outreach accomplishments did not go unnoticed, in that **Eilers** won the 2013 UCPH Faculty of Science Dissemination Award, with a citation mentioning several of our activities from past years.



Please visit sym.math.ku.dk for more information.

Funded by

Danmarks Grundforskningsfond Danish National Research Foundation