

GEOTOP: CENTRE HIGHLIGHTS 2020

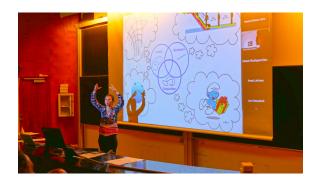
The Copenhagen Centre for Geometry and Topology opened April 1, 2020, as the world realised it was facing a pandemic. The centre quickly adapted to these new circumstances and learned to swiftly move between on-site, online, or hybrid ways of being. By the end of the year, the centre counted 10 permanent members, 3 associated members, 13 postdocs, and 15 PhD students.



RESEARCH

We made significant progress on various aspects of our research program. Highlights include: Land and 8 coauthors finished a substantial 3-volume manuscript on Hermitian *K*-theory, simultaneously laying new and improved foundations and settling old questions. In particular, they gave an essentially complete calculation of symplectic and orthogonal *K*-theory of *Z*, the ring of integers.

Also, Randal-Williams and Kupers studied moduli spaces of high-dimensional disks. They made substantial progress in understanding their rational homotopy theory and introduced a new method that gives hope of eventually understanding the entire rational homotopy type of these fundamental building blocks.



ACTIVITIES

After a successful Opening Symposium, the year was marked by a highly popular masterclass on *Condensed Mathematics* by 2018 Fields medalist Scholze and centre member Clausen. The speakers laid the foundations of this new subject. The recordings of the event can be seen on our YouTube channel (387 subscribers). This will serve as a long-term reference for those who want to learn the subject. The first lecture has already had 7,945 views!

RECOGNITION

Grodal and Wahl were both elected members of the Royal Danish Academy of Science and Letters, and Adiprasito received the prestigious EMS prize of the European Mathematical Society.





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