Thursday, March 15\textsuperscript{th} from 3:30 PM to 4:30 PM
Friday, March 16\textsuperscript{th}, from 2:00 PM to 4:00 PM
in Room AAC 006

To be followed by discussion;
“Large-scale Properties of the Mapping Class Group”

Ursula Hamenstädtt
(Université de Bonn)

Target audience: doctoral students, researchers and Professors in Mathematic.

Abstract:

The lectures begin with the discussion of some natural compact topological spaces on which the mapping class group acts as a group of homeomorphisms. We present such a space on which this action is topologically amenable.

Next we give a fairly explicit description of an asymptotic cone of the mapping class group. We show that this cone is topologically rigid in the following sense: The group of isotopy classes of homeomorphisms of the cone contains the mapping class group as a subgroup of finite index.

As an application, we obtain that a finitely generated group which is quasi-isometric to the mapping class group is commensurable to it.