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*Fakultät für Mathematik
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Raum: G.15.19

The Complex Analysis group from the University of Wuppertal organizes a mini-course given by Prof. Burglind Jöricke.

Braids and mapping classes: conformal module and entropy

(Prof. Burglind Jöricke)

Schedule:

(all times c.t.)

day	date	time	room
Monday	24.04.2017	16 – 18	G.15.25
Tuesday	25.04.2017	14 – 16	G.15.25
Monday	08.05.2017	16 – 18	G.15.25
Tuesday	09.05.2017	14 – 16	G.15.25

Abstract: The series of lectures is aimed on giving a brief introduction to a popular circle of ideas related to braids and mapping classes and invariants of them. It will cover the following topics and establish relations among them:

1. Introduction to braids and mapping classes.
2. Teichmüller theory, including Bers' point of view of Thurston's classification of mapping classes.
3. The entropy of mapping classes of closed Riemann surfaces and of braids.
4. The 13th Hilbert problem.
5. The conformal module of conjugacy classes of braids as obstructions for continuous objects to be isotopic to the respective holomorphic objects. Applications.
6. The relation between entropy and conformal module.
7. The conformal module of braids (rather than of conjugacy classes of braids). Upper and lower bounds for 3-braids.