



Kolloquium über Reine Mathematik

Einladung zu einem Vortrag

Dienstag, 09. April 2019

17 Uhr s.t., Geom H4

Prof. Dr. Marc Burger
(ETH Zürich)

Compactifying higher Teichmueller spaces

Abstract:

Let S be a compact surface of negative Euler characteristic and G a semisimple group. Higher Teichmueller theory aims at singling out connected components of the variety of G -representations of the fundamental group of S which are formed of representations with geometric significance, echoing the case of $\mathrm{PSL}(2, \mathbb{R})$ where the relevant component is the classical Teichmueller space $T(S)$ classifying hyperbolic structures on S .

One of the outstanding problems is to construct compactifications of such components on which the mapping class group acts and that have good topological properties, like the Thurston compactification of Teichmueller space $T(S)$.

In this talk we discuss such compactifications in the case when $G = \mathrm{Sp}(2n, \mathbb{R})$, constructed using representations over non-archimedean ordered fields, and relate these compactifications to classical objects like the space of geodesic currents on the Surface S .

This is joint work with A. Iozzi, A. Parreau, B. Pozzetti.

Vor dem Vortrag (ab 16.30 Uhr) stehen im Raum 327 Kaffee und Tee bereit.