

# BERNOULLIS TAFELRUNDE

GRADUATE STUDENT SEMINAR

**Monday, 15 April 2024, 12:15–13:00**  
Seminarraum 05.002, Spiegelgasse 5

BEAT ZURBUCHEN

ETH Zürich

## Automorphic forms in Number Theory

### ABSTRACT

Automorphic forms are central objects in number theory at least since Riemann's proof of the functional equation for the zeta function. From a modern point of view, automorphic forms are functions on certain homogeneous spaces which correspond to unitary representations of an adelic symmetry group in a natural way. Langlands conjectured that such representations correspond to certain representations of the Galois group. This talk attempts to explain this correspondence for the special case of Hecke characters and, if time permits, modular forms.