

SPEAKER: Abhishek Saha (ETH Zurich, Switzerland)

TITLE: Determination of modular forms by Fourier coefficients

ABSTRACT: I will describe my recent work that shows that a Siegel cusp form of degree 2 for the full modular group is determined by its set of Fourier coefficients $a(S)$ with $4 \det(S)$ ranging over odd square-free integers. This has an important application relating to the Bessel model for the relevant automorphic representation. The method is based on reducing the question to a very similar one about Fourier coefficients of classical cusp forms of half-integral weight, which is then proved by analytic means.