

SPEAKER: Manami Roy (Lafayette College)

TITLE: Quaternionic Maass Spezialschar on split $SO(8)$

ABSTRACT: The classical Maass Spezialschar is a subspace of the level one holomorphic Siegel modular forms of degree 2 given by certain linear relations between the Fourier coefficients. Work of Andrianov, Maass, and Zagier identifies the classical Maass Spezialschar with the space of Saito-Kurokawa lifts. We describe an analogue of the classical Spezialschar for space of quaternionic modular forms on split $SO(8)$ using Fourier coefficients and show an equivalence of this space with quaternionic Saito-Kurokawa subspace (that arise as theta lifts from holomorphic forms on $Sp(4)$). In order to prove this result we develop a theory of a Fourier-Jacobi coefficient of quaternionic modular forms on orthogonal groups.