Speaker: Manami Roy

Title: Relationship between counting cuspidal automorphic representations of GSp(4) and dimensions of Siegel cusp forms

Abstract: There is a well-known connection between Siegel modular forms of degree 2 and automorphic representations of GSp(4). This talk will explore this connection to count a specific set of cuspidal automorphic representations of GSp(4) whose local component at $p = 2$ admits non-zero fixed vectors under the principal congruence subgroup of level 2. These in turn lead to new dimension formulas of the space of Siegel cusp forms of degree 2, in particular with respect to the Klingen congruence subgroup of level 4. This work (arXiv:2207.02747) is joint with Ralf Schmidt and Shaoyun Yi.