Speaker: Dipendra Prasad

Title: A mod-p Artin-Tate conjecture and generalized Herbrand-Ribet

Abstract: Following the natural instinct that when a group operates on a number field then every term in the class number formula should factorize compatibly according to the representation theory (both complex and modular) of the group, we are led – in the spirit of Herbrand-Ribet's theorem on the p-component of the class number of $\mathbb{Q}(\zeta_p)$ – to some natural questions about the p-part of the classgroup of any CM Galois extension of $\mathbb{Q}$ as a module for $\mathrm{Gal}(K/\mathbb{Q})$, and about integrality of L-values. This talk will attempt doing this in terms of precise conjectures.