

Title: Hopf Algebras and Associated Group Actions

Abstract: We will give an introduction to Hopf algebras, especially quasitriangular and factorizable Hopf algebras. We will then explain how a factorizable Hopf algebra leads to a projective action of the modular group. If the Hopf algebra is in addition semisimple, the kernel of this action is a congruence subgroup whose level is equal to the exponent of the Hopf algebra. We will explain how equivariant Frobenius-Schur indicators can be used to establish this result. The talk is based on joint work with Yongchang Zhu.