

Title: Equivariant Frobenius-Schur Indicators for Hopf Algebras

Abstract: The second indicator for a complex representation of a finite group was introduced by F. G. Frobenius and I. Schur in 1906. Over time, these indicators have been generalized in various ways. In this talk, we will present a generalization that connects them with a certain representation of the modular group in such a way that the indicators are equivariant with respect to this action. These equivariant indicators can be defined not only for groups, but also for Hopf algebras. As we will explain, they can be used to show that the kernel of the representation contains a congruence subgroup, so that the action factors over a finite quotient. The talk is based on joint work with Y. Zhu.