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Yevgenia Kashina, Susan Montgomery and **Siu-Hung Ng***, Iowa State University, Ames, IA 50014. *On some gauge invariants of Hopf algebras.*

Frobenius-Schur indicators of the representations of a finite group have been studied for more than a century. The notion has been recently generalized to pivotal categories and these indicators are invariants of pivotal categories. However, the representation category of a finite-dimensional Hopf algebra is not necessarily pivotal. In this talk, we introduce some gauge invariants for each finite-dimensional Hopf algebra H , and we show that these invariants coincide with the Frobenius-Schur indicators of the regular representation when H is a semisimple complex Hopf algebra. As an application, we demonstrate the inequivalence of the Taft algebras by computing these gauge invariants.

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