

# ALGEBRA SEMINAR

## *Quivers and Hall algebras*

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ABSTRACT: Quivers were introduced to provide an adequate language for the study of the representation and structure theory of finite-dimensional associative algebras (and thus, via categorification à la Bernstein-Gelfand-Gelfand, of many other algebraic objects such as various Lie algebras, algebraic groups etc). On the other hand, the Hall-Ringel algebra associated with the category of representations of a quiver over a finite field provides a categorification of quantum groups. In this talk we will discuss the classical results on representations of quivers and, if time permits, some more recent developments.

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**1:10** – 2:30 PM

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