

**SCMS Seminar**

COHOMOLOGICAL HALL ALGEBRAS IN GEOMETRIC REPRESENTATION THEORY I

Speaker: Tommaso Botta

Columbia University

Time: Tue., May. 26th, 14:00-15:30

Venue: Room 106, SCMS

Abstract: I will discuss the theory of cohomological Hall algebras (CoHA) of quivers with potentials and their application in geometric representation theory of quantum groups. In particular, I will focus on their interplay with (shifted) Yangians and the theory of stable envelopes initiated by Maulik-Okounkov and recently generalized by Cao-Okounkov-Zhou-Zhou. This is based on joint work with Ben Davison and ongoing work with Davison-Zhao-Zhu.