



THE WEIZMANN INSTITUTE OF SCIENCE  
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

Algebraic Geometry and Representation Theory Seminar

Room 290C ,Ziskind Building  
on Tuesday, Jan 03, 2017  
at 11:15

**NOTE CHANGE IN DATE TO JAN.03 2017, room 155**

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A geometric approach to Hall algebras

Abstract:

The Hall algebra associated to a category can be constructed using the Waldhausen S-construction. We will give a systematic recipe for this and show how one can use it to construct higher associativity data. We will discuss a natural extension of this construction providing a bi-algebraic structure for Hall algebra. As a result we obtain a more transparent proof of Green's theorem about the bi-algebra structure on the Hall algebra.