



THE WEIZMANN INSTITUTE OF SCIENCE  
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

Algebraic Geometry and Representation Theory Seminar

Room 155 ,Ziskind Building  
on Tuesday, Jan 08, 2019  
at 11:15

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Tensor categories in positive characteristic

Abstract:

Tensor categories are abelian  $k$ -linear monoidal categories modelled on the representation categories of affine (super)group schemes over  $k$ . Deligne gave very succinct intrinsic criteria for a tensor category to be equivalent to such a representation category, over fields  $k$  of characteristic zero. These descriptions are known to fail badly in prime characteristics. In this talk, I will present analogues in prime characteristic of these intrinsic criteria. Time permitting, I will comment on the link with a recent conjecture of V. Ostrik which aims to extend Deligne's work in a different direction.