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THE WEIZMANN INSTITUTE OF SCIENCE  
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE  
Algebraic Geometry and Representation Theory Seminar

Room 208 ,Elaine and Bram Goldsmith Building  
on Thursday, Dec 19, 2019 at 11:15

**NOTE THE UNUSUAL DAY AND ROOM**  
Max Gurevich Technion

Robinson-Schensted-Knuth correspondence at the service of  $p$ -adic  $GL_n$

Abstract:

In a joint work with Erez Lapid we constructed a new class of representations based on applying the RSK algorithm on Zelevinski's multisegments. Those constructions have the potential to be an alternative to the commonly used basis of standard representations. Intriguingly, this class also turned out to categorify a 45-year-old development in invariant theory: The Rota basis of standard bitableaux. I will talk about this classical theme and its relation to representations of  $p$ -adic  $GL_n$ , as well the expected properties of our new class.