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

Room 290C ,Ziskind Building
on Tuesday, Dec 13, 2016at 11:15

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Canonical bases in quantum Schubert cells

Abstract:

The goal of my talk (based on a recent joint paper with Jacob Greenstein) is to provide an elementary construction of the canonical basis $B(w)$ in each quantum Schubert cell $U_q(w)$ and to establish its invariance under Lusztig's symmetries. In particular, I will explain how to directly construct the upper global basis B^{up} , will show that $B(w)$ is contained in B^{up} , and that a large part of the latter is preserved by the (modified) Lusztig's symmetries.