1125-14-863 **Cristian Lenart*** (clenart@albany.edu), Department of Mathematics and Statistics, State University of New York at Albany, 1400 Washington Avenue, Albany, NY 12222, **Kirill Zainoulline**, Department of Mathematics and Statistics, University of Ottawa, 585 King Edward Street, Ottawa, Ontario K1N 6N5, Canada, and **Changlong Zhong**, Department of Mathematics and Statistics, State University of New York at Albany, 1400 Washington Avenue, Albany, NY 12222. *Parabolic Kazhdan-Lusztig basis, Schubert classes, and equivariant oriented cohomology.*

This talk is concerned with Schubert calculus for an arbitrary oriented cohomology theory in the sense of Levine-Morel. Beyond K-theory, the classes associated to Schubert varieties depend on the chosen Bott-Samelson desingularizations; therefore, a natural problem is to define canonical classes. We offer a solution in the case of the equivariant oriented cohomology theory corresponding to the 2-parameter Todd genus, which works for any partial flag variety. It is based on a new interpretation of Deodhar's construction of the parabolic Kazhdan-Lusztig basis. We make a conjecture about the relationship of the canonical classes with smoothness of Schubert varieties, and prove it in several special cases. (Received September 12, 2016)