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# Seminar

## Motivic Chern Classes of Schubert Cells and Applications

by

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### Abstract:

The motivic Chern class in K-theory is a natural generalization of the MacPherson class in homology. In this talk, we will talk about several applications of the motivic Chern classes of the Schubert cells. These classes can be used to give a smoothness criterion for the Schubert varieties, which is used to prove several conjectures of Bump-Nakasuji-Naruse about representations of p-adic dual groups and also conjectures of Lenart-Zainoulline-Zhong about Schubert classes in hyperbolic cohomology of flag varieties. The Euler characteristics of these classes are also related to the Iwahori-Whittaker functions of the dual groups. Based on several joint works with P. Aluffi, C. Lenart, L. Mihalcea, J. Schürmann, K. Zainoulline, and C. Zhong.

Date : December 16, 2020 (Wednesday)

Time : 9:00am – 10:00am (Hong Kong SAR)

Zoom link :

<https://cuhk.zoom.us/j/97838822137?pwd=ZTVvSC9abmNjR3RCcS9FTzJNTVhXdz09>

Meeting ID: 978 3882 2137

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*All are Welcome*