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Representation and Number Theory Seminar

(Nonemptiness of affine Deligne-Lusztig varieties)

by

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Abstract:

In the study of Shimura varieties, it is important to count the points reduction modulo p (Langlands-Rapoport conjecture) as it provides a way to compute the Hasse-Weil zeta function. The most interesting piece showing up in the point counting is affine Deligne-Lusztig variety (ADLV) and it has been studied in various level structures including the hyperspecial level and the Iwahori level. In this talk, we will see explicit examples of ADLV described as a set of certain lattices and flags. Moreover, we will discuss the nonemptiness criterion for ADLV along with the results already known and newly discovered. If time permits, the dimension formula will be discussed shortly.

Date : February 8, (Tuesday)

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

Zoom link :

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

Meeting ID: 978 3882 2137

Passcode : sesame

All are Welcome