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For Favour of Posting

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Representation and Number Theory Seminar

(Kazhdan–Lusztig theory for affine Lie algebras at critical level)

by

(Prof. Gurbir Dhillon)
(Yale University)

Abstract:

A basic problem in representation theory is to calculate the characters of irreducible highest weight modules. For semisimple Lie algebras this was resolved by Beilinson-Bernstein and Brylinski-Kashiwara in the early 1980s. For affine Lie algebras, this was resolved by Kashiwara-Tanisaki at non-critical central charges in the 1990s. At the remaining critical central charge certain cases are known by work of Arakawa-Fiebig, Feigin-Frenkel, Frenkel-Gaiitsgory, Hayashi, and Malikov. In forthcoming joint work with David Yang, we calculate the irreducible characters for the regular block at critical level, confirming a conjecture of Feigin-Frenkel.

Date : April 12, 2022 (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