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Representation and Number Theory Seminar

Virtual Coulomb branch and quantum *K*-theory

by

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Abstract:
In this talk, I will introduce a virtual variant of the quantized Coulomb branch by Bravermann-Finkelberg-Nakajima, where the convolution product is modified by a virtual intersection. The resulting virtual Coulomb branch acts on the moduli space of quasimaps into the holomorphic symplectic quotient *T^*N///G*. When *G* is abelian, over the torus fixed points, this representation is a Verma module. The vertex function, a *K*-theoretic enumerative invariant introduced by A. Okounkov, can be expressed as a Whittaker function of the algebra. The construction also provides a description of the quantum *q*-difference module.

Date : October 26, 2021 (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