



Department of Mathematics
The Chinese University of Hong Kong

For Favour of Posting

數學系
香港中文大學

Phone: (852) 3943 7988-9 • Fax: (852) 2603 5154 • Email: dept@math.cuhk.edu.hk
Rm. 220, Lady Shaw Building, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong

Representation and Number Theory Seminar

Quantum Difference Equations, 3d Mirror Symmetry and Wall-crossing Operators

by

Professor Yakov Kononov
Yale University

Abstract:

The talk is based on joint work with A.Smirnov. We obtain a factorization theorem about the limit of elliptic stable envelopes to a point on a wall in $H^2(X,R)$, which generalizes the result of M.Aganagic and A.Okounkov. This approach allows us to extend the action of quantum groups, quantum Weyl groups, R -matrices, etc., to actions on the K -theory of the symplectic dual variety. In the case of the Hilbert scheme of points in the plane, our results imply the conjectures of E.Gorsky and A.Negut. As another application of this technique, we gain a better geometric understanding of the wall crossing operators and the quantum difference equations.

Date : September 21, 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