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## Representation and Number Theory Seminar

## Parabolic Hitchin Systems and Topological Mirror Symmetry

by

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## Abstract

We first introduce (parabolic) Hitchin systems on smooth projective curves and show the relation of singularities of generic spectral curves with Kazhdan-Lusztig maps on nilpotent orbits. Then we give an explicit description of generic fibers. As an application, we show the topological mirror symmetry for parabolic  $SL_n/PGL_n$  Hitchin systems. We will also discuss some generalizations to various  $SO_{2n+1}/Sp_{2n}$  Hitchin systems whose Higgs fields have Springer dual nilpotent residues at marked points. This talk is based on joint works with Xiaoyu Su and Xueqing Wen.

Date	:	10 January, 2023 (Tuesday)
Time	:	4:00pm – 5:00pm (Hong Kong SAR)
Venue	:	Room 219, Lady Shaw Building, CUHK

All are Welcome