

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research
Department of Mathematics*

GEOMETRY SEMINAR

Bases of upper cluster algebras and tropical points

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Abstract

It is known that many (upper) cluster algebras possess very different good bases which are parameterized by the tropical points of cluster varieties. For any given injective reachable upper cluster algebra, we describe all of its bases parameterized by the tropical points. In addition, we obtain the existence of the generic bases for such upper cluster algebras. Our results apply to many cluster algebras arising from representation theory, including quantized enveloping algebras, quantum affine algebras, double Bruhat cells, etc.

Date: February 19, 2019 (Tuesday)

Time: 4:30 - 5:30pm

Venue: Room 210, Run Run Shaw Bldg., HKU

All are welcome