



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

SEMINAR ON PURE MATHEMATICS

The derived birational geometry of nested quiver varieties

by

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Abstract

Recently, Jeroen Hekking developed the derived blow-up theory of closed embedding of derived schemes, which generalize the theory of Rydh and Khan of the regular embeddings. We study Hekking's theory when two derived schemes are both quasi-smooth, and observe surprisingly great property in the birational geometry, enumerative geometry and derived category of coherent sheaves. We apply this theory to two nested quiver varieties, and prove that after blowing up the diagonal, they are isomorphic to a quadruple moduli space which Negut first found for the Jordan quiver.

Date : 20 March 2023 (Monday)

Time : 4:00pm

Venue : Room 3598 (Lifts 27/28)

All are Welcome!