

FINITE DIMENSIONAL ALGEBRAS AND QUANTUM GROUPS**Speaker: Jie Du****University of New South Wales****Time: Tue., Nov. 10th, 16:00-17:00****Venue: Room 102, SCMS**

Abstract: In 2008, we published a book in the same title by the American Mathematical Society. The theme of the book is to introduce two “H-approaches” from finite-dimensional algebras to infinite-dimensional quantum groups. The Hecke algebra approach to quantum groups was initiated by Beilinson-Lusztig-MacPherson in 1990, while the Hall algebra approach to quantum groups was invented by Claus M. Ringel in the same year. Since then, both approaches are developed greatly. I will start with some history since 1987 and will briefly mention how the research ties between north and south of China were established. Contents of the book and some new developments since the book publication will also be discussed. As an example, I will talk about a recent completion of an uncovered structural connection between (finite) Hecke-Clifford superalgebras and (infinite) quantum queer supergroups and will show how to build the quantum queer supergroup using Hecke-Clifford superalgebras.