

## **AFFINE FLAG VARIETY AND QUANTUM SYMMETRIC PAIR**

## Speaker: Zhaobing Fan Harbin Engineering University

## Time: Thu, Sep. 12, 10:30-11:30

## Venue: Room 106, SCMS

**Abstract:** In this talk, I'll introduce Schur algebra and its Lusztig subalgebra associated to affine flag variety of type D. We show that the i-quantum group corresponding to

subalgebra of the Lusztig algebra forms quantum symmetric pairs together with  $U_q(\operatorname{sl}_n)$ .

We further construct monomial and canonical bases of its idempotented version and prove the positivity properties of the canonical basis with respect to multiplication and the bilinear pairing. This is a join work with Quanyong Chen.