



## Special seminar

### All-electrical generation of spin-polarized currents and Entanglement entropy fluctuation

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**Time: 4:00pm, Dec 5, 2016 (Monday)**

**: 2016 12 5 4:00**

**Venue: w563, Physics building, Peking University**

**563**

#### Abstract

We will discuss two recent work in our group. First, we will talk about our proposal on a novel method to control and generate spin polarized current in gated stanene nanoribbons in the quantum spin Hall (QSH) insulator regime by all electrical means in the absence of spin-flip mechanism. Then we will present a theoretical formalism to calculate the entanglement entropy fluctuation as well as its higher order cumulants generated by electronic transport in open systems.

#### About the Speaker

1982 1988  
1993 20  
47 1999 280 10000 H index  
2009 2013