THE UNIVERSITY　　　　　　　　　　**OF HONG KONG**

Institute of Mathematical Research
Department of Mathematics

Geometry Seminar

Mackey-Higson bijection and deformation of Harish-Chandra sheaves

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Abstract

Inspired by the observation of Mackey, Higson suggested a mysterious bijection between irreducible representations of a semisimple Lie group G and that of its Cartan motion group G_0, which is the normal bundle of a maximal compact subgroup K inside G. Recently such bijection has been established by Afgoustidis for tempered representations, while a geometric explanation for this is still missing. I will show that this bijection comes from natural deformation of standard Harish-Chandra sheaves over the flag variety. This deformation can be interpreted as deformation quantization of coadjoint orbits.

Date:	September 27, 2016 (Tuesday)
Time:	4:00 – 5:00pm
Place:	Room 210, Run Run Shaw Bldg., HKU

All are welcome