

# 复旦大学物理系物质科学报告

### Physics Department Colloquium

## Coherent heteronuclear spinor dynamics in an ultracold spin-1 mixture

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**Abstract:** In this talk, I will report the recent experimental observation of coherent heteronuclear spinor mixing dynamics between two different atomic species induced by the inter-species spin-spin interactions. The dynamics depends strongly on external magnetic fields and shows a resonant feature when the field is varied. Surprisingly, we find that these resonances can be changed over a large range with tiny effective magnetic fields induced by light. These results establish spinor mixture as an intriguing system with versatile magnetic properties which can be conveniently controlled with external fields.

Time:2:00pm, Tuesday, 02 December, 2014Location:Physics Building, Room 221B(Cookies and coffee will be served from 1:30 pm)