



复旦大学物理系物质科学报告

Physics Department Colloquium

Squeezed states of light - generation and applications

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Optical measurements are intrinsically limited by the quantum shot noise, which is the manifestation of the optical equivalent of the Heisenberg uncertainty principle. I will talk about "squeezed" quantum states of light which allow performing measurements beyond standard quantum limit. I will introduce several methods for squeezed light generation and outline several applications of the squeezed light, such as optical measurements without photons and enhancement of the sensitivity for optical magnetometers and the gravitational wave antenna such as LIGO.

Time: 2:00 pm, Tuesday, 2013.12.24

Location: Physics Building, Room 221B

(Cookies and coffee are served from 1:30 pm)