
Seminar

Light Coherence and Quantum Mechanics

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Starting from the standard treatment of Young's double-slit experiment, I shall discuss the modern viewpoints and introduce various degrees of coherence of light. I shall describe in detail both the classical and the quantum descriptions of the Hanbury-Twiss intensity interference and its deep consequences. I shall then describe variants of the Hanbury-Twiss effect and the notions of bunching and antibunching. I shall conclude by discussing the implications of all these interference experiments for our understanding of quantum mechanics, and by identifying some future directions.

Tuesday, Jun 23rd 2015

4:00 PM (Tea/Coffee at 3:45 PM)

Seminar Hall, TCIS