

PHYSICS AND ASTRONOMY COLLOQUIUM

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Exploring New Frontiers of Quantum Optical Science

We will discuss recent developments at a new scientific interface between quantum optics, nanoscience and quantum information science. Specific examples include the use of quantum optical techniques for manipulation of individual atom-like impurities at a nanoscale and for realization of hybrid systems combining ultracold atoms with nanophotonic devices. We will discuss how these techniques and systems are used for realization of quantum nonlinear optics, quantum networks, magnetic resonance imaging with single atom resolution and nanoscale sensing in biology.



THURSDAY, FEBRUARY 19, 2015 | 4:00 PM | HAWKING AUDITORIUM



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