

Space Science Seminar
Tuesday, 2014 May 13 1:30pm
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**X-ray Mirrors: Applications from Inertial Confinement
Fusion to Free Electron LASERs**

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The x-ray science and technology group applies its expertise to a variety of programmatic activities within the Lawrence Livermore National Laboratory (LLNL), including plasma and high-energy density physics, astrophysics, material science, and nuclear non-proliferation. An important component of our group's work is the design and development of x-ray optics to support these activities, with particular emphasis on multilayer coating manufacturing and characterization. In this talk I will present a summary of my work at LLNL, which includes the design of an x-ray imager for the National Ignition facility (NIF), the conceptual development of Bragg mirrors for pump-and-probe experiments at a free electron lasers (FELs), and wavefront simulations in support of the x-ray adaptive optic project for x-ray beamlines.

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