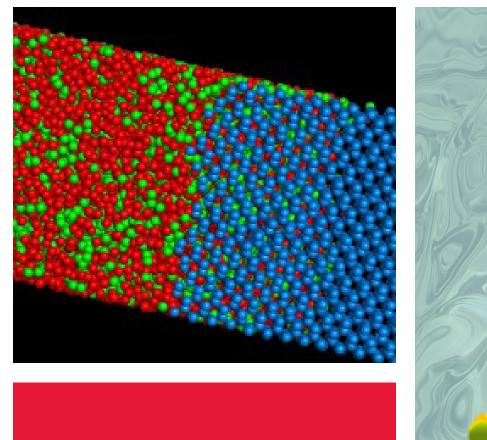
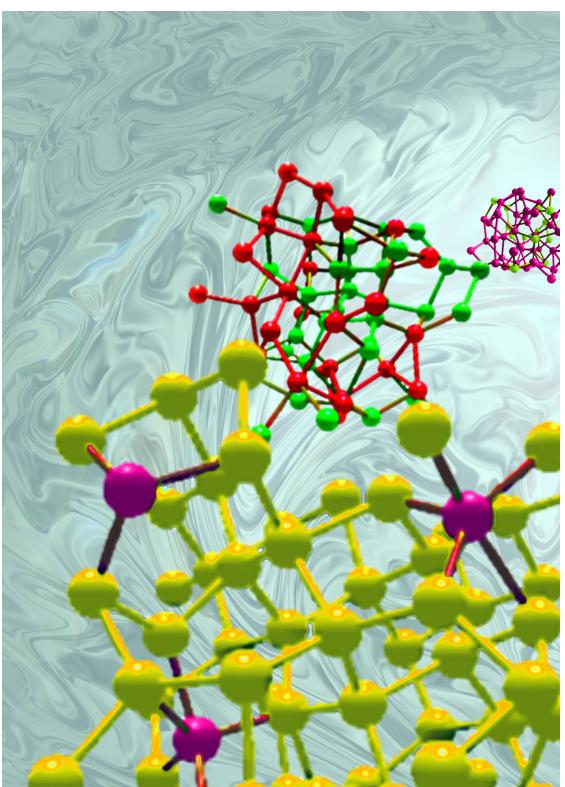
Boston University Physics Colloquium







Understanding Liquid Silicon

Silicon is the second most abundant element in the earth's crust, and a key component of semiconductor technology. Although most familiar perhaps in its crystalline and amorphous solid forms, silicon in its liquid form exhibits a fascinating array of properties, many of which are related to the possibility that the liquid can exist in two distinct forms. The possibility of a phase transition between two liquid forms in silicon, with a novel liquid-liquid critical point, links its phase behavior to that of water and silica (also key components of our natural environment) and sheds light on its changes in electronic properties, and on non-trivial patterns of change in crystal nucleation rates. This talk will trace the development of our current understanding of liquid silicon, starting from pioneering experimental and theoretical work in the late seventies.

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April 12, 2011 (Tuesday) at 3:30pm (Refreshments at 3:15pm) SCI 107, Metcalf Science Center, Boston University

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