School of Physics & Astronomy



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Seminar Wednesday 23rd April 2008 4-5pm Conference Auditorium 2

Title: Solids that break all the usual rules

ABSTRACT

"Solid" suggests the idea from elasticity of a substance with well-defined shape that costs energy to deform. Moreover, shape changes in response to temperature change, for instance, are modest. Combining liquid crystalline order with rubbery elasticity gives solids that do not always obey such Hookean notions that we have for so long been comfortable with.

I shall give some demonstrations of such unusual solids and explain qualitatively how they function as radically new materials.