

Universal Properties of Disordered Solids at Ultra-Low Temperatures

Thursday

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4:00 P.M.

Rm 184 NSH

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Materials such as glasses, polymers, disordered crystals, quasi-crystals and proteins lack long range order, and are thus referred as disordered solids. This diverse class of materials exhibit remarkable universal acoustic and thermal properties at ultra-low temperatures. In this talk I will give a brief overview of the standard model in the field (the tunneling two level systems), discuss some of its weaknesses, and then proceed to outlining a rather generic model that yields some of the universal properties previously not understood.