



DVR 0065528

## Seminar

## Prof. David Mukamel

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## Mixed order phase transitions: from DNA denaturation to jamming processes

Wednesday, October 11, 2017

at 15:30 h

## ESI, Schrödinger Lecture Hall

**Abstract:** Phase transitions of mixed nature, which on the one hand exhibit a diverging correlation length as in second order transitions and on the other hand display a discontinuous order parameter as in first order transitions have been observed in a diverse classes of physical systems. Examples include DNA denaturation, models of wetting, glass and jamming transitions, rewiring networks and some one-dimensional models with long-range interactions. An exactly soluble model which provides a link between some of these rather distinct classes of systems is introduced. Renormalization group analysis which provides a common framework for studying some of these systems, elucidating the relation between them will be discussed.

H. Posch

September 18, 2017