

Abstract Submitted  
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**Active nematics: fluctuations and coarsening**<sup>1</sup> SRIRAM RAMASWAMY, CCMT, Department of Physics, Indian Institute of Science, Bangalore 560 012, SHRADHA MISHRA, CCMT, Department of Physics, Indian Institute of Science, Bangalore 560 012, INDIA, FRANCESCO GINELLI, HUGUES CHATE, Service de Physique de l'Etat Condense', CEA/Saclay, 91191 Gif-Sur-Yvette, FRANCE, SANJAY PURI, School of Physical Sciences, Jawaharlal Nehru University, New Delhi 110 067, INDIA — Nonequilibrium steady states with spontaneous nematic order are known to arise in collections of amoeboid cells as well as granular-rod monolayers. Recent studies [EPL 62 (2003) 196-202; PRL 96, 180602 (2006); PRL 97 (2006) 090602; Science 317 (2007) 105] have established that these states differ radically from thermal equilibrium systems of the same spatial symmetry. This talk will present results from our studies of microscopic as well as coarse-grained models of active nematics, highlighting the unique, fluctuation-dominated character of coarsening in these systems.

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