

Internal Seminar

Coarsening, fluctuations and extreme values

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Coarsening refers to a process in which order is built up in a system prepared in a disordered state. We study broad classes of aggregation-fragmentation models in which ordered phase is identified with the existence of a macroscopic condensate, for which coarsening regime is characterised through local extremum mass. We observe that this regime is fluctuation dominated, that is markedly distinct from the steady state behaviour. In fact, a 'pre-asymptotic' state is found to govern the coarsening kinetics. We also studied the CD models in which both the steady state and coarsening show fluctuation dominated order. Time permitting, the different phases of these models in the steady state and properties of the extremal cluster size in the coarsening regime will be outlined.

Tuesday, Oct 4th 2022

04:00 PM

Seminar Hall, TIFR-H