

Internal Webinar

Local correlation and extreme values in CD models

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The fluctuation dominated phase ordering (FDPO) refers to an unusual phase that simultaneously exhibits macroscopic order and large fluctuations. Recently it is proposed that a suitably defined 'local' correlation can characterize the statistical properties in such phases. In the ongoing work we numerically studied the steady state and coarsening properties of this quantity in relation to coarse-grained depth (CD) models which are known to exhibit FDPO behaviour. Further, the ordering kinetics in these models is governed by the behaviour of the largest domains. We find that the maximum cluster size possesses nontrivial finite size and finite time effects, which may offer a novel characterization of FDPO.

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