

abstract

Workshop on Topology: Identifying Order in Complex Systems
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

The scaling symmetries of both static and dynamic critical phenomena naturally yield associated power laws and scaling functions. Going beyond simple scalings, we reveal how general emergent symmetries control the coarsening statistics of non-equilibrium phase ordering systems. In particular, we discover that a supersymmetric-Lorentzian-Parabolic symmetry group G governs the surface statistics of a class of non-equilibrium, nano-faceting crystal growth models.