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Authors:	Kumar, Rupendra (/jspui/browse?type=author&value=Kumar%2C+Rupendra)
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Abstract:	In this thesis, we study a system of hard-core particles sliding locally down-wards on a fluctuating one-, and two-dimensional surfaces with overall zero tilt. We consider surfaces that evolve according to (i) Kardar-Parisi-Zhang (KPZ), and (ii) Edwards-Wilkinson (EW) dynamics. We find that the surface fluctuations lead to large-scale clustering of particles showing a cusp singularity in the scaled two-point correlation function at small arguments, signifying the breakdown of Porod law – a signature of fluctuation-dominated phase ordering.
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