

# Universal Correlators & Distributions as Experimental Signatures for 2+1 KPZ Growth

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We discuss height-height correlations in the transient growth regime of the  $2 + 1$  KPZ universality class, with a particular focus on the its spatial covariance of the underlying two-point statistics. Making comparison to AFM kinetic roughening data in 2d organic thin films, we use our universal  $2 + 1$  KPZ spatial covariance to extract key scaling parameters for this experimental system. Additionally, we explore the i) height, ii) local roughness, and iii) extreme value distributions characteristic of these oligomer films, finding compelling agreement in all instances with our numerical integration of the KPZ equation itself. Finally, investigating nonequilibrium relaxation phenomena exhibited by  $2 + 1$  KPZ Class models, we have unearthed a universal it temporal covariance characterizing ageing kinetics in these systems.