

# Kolloquium Mathematische Physik

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## Random Matrices and the Kardar-Parisi-Zhang Equation

The one-dimensional KPZ equation is a nonlinear stochastic PDE, which in a continuum approximation describes the motion of an interface including its fluctuations. For particular solutions of this equation, objects familiar from random matrix theory, like the Tracy-Widom distribution, make their appearance. Using simple models I will illustrate how this connection arises and also indicate its limitations.

**Freitag, 07.06.2013, 16:15 Uhr**

**Ort: V2-210/216**