**CRAIG TRACY**, University of California, Davis

*Turbulent liquid crystals, KPZ universality and the asymmetric simple exclusion process*

We review recent experimental work on stochastically growing interfaces and compare these results with the recent theoretical developments for the Kardar-Parisi-Zhang equation and the closely related asymmetric simple exclusion process. The emphasis in this talk will be on the underlying results in the asymmetric simple exclusion process.