



# TKM-/FOR877-Seminar

Am Mittwoch, 13.05.2015, um 14.15 Uhr spricht

Prof. Jan Kierfeld  
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über

## Optimal paths in a random potential

Finding the "best way" in a frozen random potential landscape is a classic problem in the field of disordered systems with many applications ranging from optimization problems to polymer physics. It also connects to other important problems from statistical physics such as the KPZ-equation, which is the most generic non-linear stochastic growth equation. The "best way" depends on the type of path we consider, i.e., whether we want to minimize its length or minimize its curvature. I will discuss numerical and analytical results on optimal stiff paths, which minimize curvature, and compare to paths under tension, which minimize length. I will also discuss what these results can tell us about the KPZ equation.

**Ort:** ITP, Brüderstraße 16, Raum SR 114

*Interessenten sind herzlich eingeladen!*