

# Abstract

Oberwolfach Workshop:

## **Interplay of Analysis and Probability in Applied Mathematics**

Dates:

**11 - 17 February 2018** (Code: 1807)

Organizers:

**Volker Betz, Darmstadt**  
**Nicolas Dirr, Cardiff**  
**Wolfgang König, Berlin**  
**Florian Theil, Warwick**

It is widely recognised that stochastic effects have to be included in the mathematical modelling of many physical systems. On the mathematical side, this creates an increasing need to combine analytic and stochastic techniques. In addition, a number of challenging problems only become tractable when methods from analysis and probability are combined. This is an area of strong growth and potential. The proposed workshop will address the need for a joint forum of discussion, collaboration and exchange between analysts and probabilists, and will contribute to the efforts to surmount the language barrier between the two communities. The focus of the workshop is on recent and currently emerging progress in the investigation of complex physical systems, using a combination of analytical and stochastic methods.