

#### Institut für Physik

# Theoriekolloquium

### Am **30. April 2020** um **14.15 Uhr** in **W2 1-143** hält

## Herr Prof. Dr. Imre Kondor (London)

einen Vortrag mit dem Titel

### Phase transitions in random geometry

Phase transitions appear in a number of random geometrical problems, with applications in a wide interdisciplinary field from operations research to statistical learning theory, signal processing, compressed sensing, ecology, economics and finance. This talk will focus on three of these transitions: the time-honoured Cover-problem related to the perceptron, the feasibility of a minimax problem related to financial risk, and the existence of positive solutions to a set of linear equations related to a number of problems from chemical evolution to ecology and portfolio optimisation. The solutions to these problems are interrelated and it may be enlightening to show up these relationships explicitly. The talk will also indicate some of the several ramifications of these problems in risk management and in models of jamming in glasses.

Interessierte sind herzlich eingeladen.

gez. Prof. Dr. Andreas Engel