

Cologne Evolution Colloquium

SFB 680
Molecular Basis of
Evolutionary Innovations

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Insights into the genotype-phenotype map and how it is modulated by the environment

Understanding the causal relationship between genotype and phenotype is a major objective both in humans and plants. The main interest is in understanding trait architecture and identifying loci contributing to the respective traits. Genome-wide association mapping (GWAS) is one tool to elucidate these relationships and has been successfully used in many different species. However, most studies concentrate on marginal marker effects and ignore epistatic and gene-environment interactions. These interactions are problematic to account for, but are likely to make major contributions to many phenotypes. Understanding these interactions is crucial to conceive trait architecture and predict phenotypes. I will present some data on statistical approaches to tackle these challenges and present some results for trait analysis in *Arabidopsis thaliana*

Wednesday, June 28, 2017, 17:00

University of Cologne, Institute for Theoretical Physics
Conference Room 2, Ground Floor

Hosted by Andrea Schrader