



SFB-Seminar, "Deformations: classical and modern" (Teilprojekt C3)

ZEIT:

24.10.2016, 14:00 Uhr - 17:00 Uhr

ORT:

FU Pflanzenphysiologie

PROGRAMM:

14:00 - 15:00 Kaffeepause (Ort: Arnimallee 3, Foyer vor dem Hoersaal)

15:00 - 16:00 **PD. Dr. David Ploog (FU Berlin)**

Classical deformation theory

The concept of deforming a mathematical object, such as a variety, a bundle on a manifold, an algebra, or a complex structure, is very old. In many cases, infinitesimal deformations can be understood very well through homological methods.

In the first talk, we will give a gentle introduction to this topic, and explain in concrete examples the concept of functors on Artin rings. These capture the concept of infinitesimal deformations in a crucial way.

16:00 - 17:00 **Dr. Will Donovan (Kavli IPMU)**

Non-commutative deformations and flops

The second talk presents recent research by Will Donovan and Michael Wemyss: the idea is to allow non-commutative rings as bases for deformations. This has surprising applications and allows, for example, to understand geometric problems about flops that have been open for decades.

Kontakt:

Humboldt-Universität zu Berlin . Institut für Mathematik
SFB 647 . Unter den Linden 6 . 10099 Berlin
Tel. +49 30 2093 1804 . Fax. +49 30 2093 2727
sfb647@math.hu-berlin.de

www.raumzeitmaterie.de