



**Einladung  
zum  
Physikalischen Kolloquium**

**Montag, 22.06.2015  
16:15 Uhr in N24/H13**



**Prof. Dr. Dieter W. Heermann**

Institut für Theoretische Physik  
Universität Heidelberg

**The Physics of Chromosomes: Loops and Entropy, that's what it's all about**

In vivo, chromosomes due to dynamic association with protein factors fold to form three-dimensional structures. Many experiments have paved the way to understand folding and the nuclear architecture of the genome for at least in eucaryotes but also beyond. Based on these experiments and models a fundamental understanding of the key principles that drive the physical organization has become possible through the concepts of loop and entropy. Using the concept of loop, models are now able to reproduce the results from several experiments within the framework of loop and entropy. Linking biological function to structure they moreover are able to make predictions.

Ab 15.45 Kaffee, Tee und Kekse vor dem Hörsaal H13

**Organisation: Prof. Dr. F. Jelezko, Tel. 23750**

**Host: Prof. Dr. C. Gebhardt, Tel. 23364, off.: 23051**