



Münchner Physik- Kolloquium

Winter
2016/17

Twisting DNA: The role of twist-bend coupling

Prof. Dr. Enrico Carlon, *KU Leuven, Belgium*

Monday, 12 December 2016, 17:15 h

Hörsaal H 030, Fakultät für Physik der LMU, Schellingstraße 4, München

DNA is well-known for its role as the carrier of genetic information. To perform its function, the double helix interacts with proteins and these interactions are responsible for its bending, twisting, and stretching. Understanding the mechanical properties of DNA is therefore essential to know how the molecule of life interacts with other biomolecules. In this talk I will discuss some recent work on the torsional properties of double stranded DNA. It has been known for some time that the standard elastic model of DNA fails to reproduce precision single molecule torsional measurements. Here we show that an extended model with a direct twist-bend coupling term can reconcile theory and experiment. The role of this coupling on other static and dynamic properties of DNA is also discussed.

Student event: Meet the speaker

We invite you to a **student-only** discussion-round with Prof. Dr. Enrico Carlon before his Munich Physics Colloquium talk.

Be curious and feel free to ask any question.

Monday, 12 December 2016, 16:00 h

Room HU123 (basement), Fakultät für Physik der LMU, Schellingstraße 4, München

