

## Gemeinsames Kolloquium des KIT und der Universität Heidelberg

Hendrik Dietz, TU München

»Towards nanoscale DNA machines and robot«

*Einführung: G.U. Nienhaus*

---

It is notoriously difficult to observe, let alone control, the position and orientation of molecules because of their small size and the constant thermal fluctuations that they experience in solution. Molecular self-assembly with DNA provides a route for placing molecules and constraining their fluctuations in user-defined ways and with up to Angstrom-scale precision. These positioning options open attractive and unprecedented avenues for scientific and technological exploration, in particular with respect to the creation of artificial molecular machines. In my talk I will introduce some of the key concepts and methods, and highlight a number of recent developments.

---

**Freitag, 15.07.2016, 17 Uhr c.t.,**  
**Gaede-Hörsaal, Physik-Flachbau (Geb. 30.22).**  
**Anschließend Stehempfang im Gastdozentenhaus „Heinrich Hertz“**