



WESTFÄLISCHE  
WILHELMS-UNIVERSITÄT  
MÜNSTER



FACHBEREICH  
PHYSIK

# › Allgemeines Physikalisches Kolloquium

› Donnerstag, 09.06.2016 um 16 Uhr c.t.



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## Colloidal Suspensions near and far from thermal Equilibrium

By now, colloidal particles are firmly established as versatile model systems to address fundamental problems in the realm of solid state- and statistical physics. Because interaction forces, dynamics and shape of colloids can be modified at will, they allow for experiments which are not (yet) feasible in atomic systems.

With few examples such as nanotribology, critical Casimir forces and stochastic thermodynamics, I will discuss how colloids permit to understand these phenomena in unprecedented detail. When colloids are additionally equipped with a self-propulsion mechanism, they show remarkable resemblance with living systems and provide intriguing opportunities to investigate the conditions for the appearance of emergent behavior in non-equilibrium systems.