

LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN

ARNOLD SOMMERFELD CENTER FOR THEORETICAL PHYSICS



Sommerfeld Theory Colloquium

Dr. Florian Thüroff

Collective Motion: How Activity Matters

Examples of active matter systems are abundant in nature, ranging from extended herds of wilderbeast on the scale of several kilometers down to collections of macromolecules making up the mitotic spindle at the scale of only a few microns. Probably the most outstanding feature of such systems is their propensity to establish well-ordered states in a fully self-organized manner. This talk highlights the basic mechanisms underlying the emergence of collective motion in such active matter systems and introduces some of the basic concepts to capture the physics of self-propelled many-particle systems from a kinetic perspective.

Wednesday, 25 May 2016, 16:15h, Room A348/349, Theresienstr. 37/III