

# Eugene Wigner Colloquium

*joint event of GRK 1558 and SFB 910*



## Prof. Hartmut Löwen

University of Düsseldorf

### “Collective dynamics of self-propelled particles: from crystallization to turbulence”

While the collective behaviour of passive colloidal particles is by now well-studied, we are just at the beginning to understand many-body properties of self-propelled “active” particles. Bacteria show interesting swarming and this can be mimicked by artificial colloidal microswimmers.

The talk provides an introduction into the physics of active particles and will then address a number of phenomena in active matter ranging from the most disordered state of matter (turbulence) to the most ordered state of matter (crystal).

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**Thursday, 16.01.14 · 16:15h · EW 202**

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