



# DÉPARTEMENT DE PHYSIQUE THÉORIQUE

## COLLOQUE DE PHYSIQUE THÉORIQUE

- Sujet:** The world of Vicsek-like models and related experiments
- Orateur:** Hugues Chaté, CEA Saclay
- Lieu:** Auditoire Stueckelberg
- Date:** Vendredi 24 mars 2017
- Heure:** 14h15

### Résumé:

After a brief introduction to the fast-growing field of active matter, I will review our current knowledge of its emblematic minimal model, the Vicsek model, and its siblings. I will detail the new physics that emerges at the collective level in Vicsek-style models where local alignment competes with noise, and point to pending important questions related to our understanding of fluctuations. Finally, i will show that the restrictive framework of these models does have some direct relevance in the real world by describing recent experiments performed on bacterial suspensions.

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