





## **Modeling active Matter, From Sperm to Tissues**

by

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## Abstract:

Active Materials are a growing field of interest in the Soft Matter community. The internal energy consumption of active Materials leads to an amazing amount of fascinating and surprising behaviors. In this Seminar I will present a small Zoo of active systems that I studied in the recent years. Ranging from the dynamics of single sperm to multi sperm and cilia interactions, from self propelled particles to coarse grained descriptions of active suspensions, from growing tissues under pressure to wound healing. Across the diversity of systems, a certain theme persist: Using a minimalistic model to capture the essential feature of the underlying physics.

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