SEMINAR | Active polymers: from living blobs to IgNobel prize for chemistry

SANDER WOUTERSEN

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15:00 to 16:00
Seminar Room

Particles that consume energy to move (i¿½active matteri¿½) are a hot topic in soft-ma ter physics. Experimental work has focused mostly on point-like particles; for active polym rs, there is plenty of theory and simulations, but hardly any experiments, probably bec use active polymers are difficult to synthesize. As an easy alternative, we have done experim nts on ensembles of long, thin worms (Tubifex) that behave as active polymers. In this informal talk, we will discuss the rheology, phase separation, and chromatography of these active-polymer worms (this last idea was awarded the IgNobel prize for chemistry). We will also discuss some practical aspects, such as how to anaesthetize a worm, building a worm-chromatography setup in your living room, and the importance of aquarium shops for fundamental research. Please bring your phone: the talk will contain an online quiz and you can win a prize!

Hosted by: Prof. Dr. Nicoletta Liguori