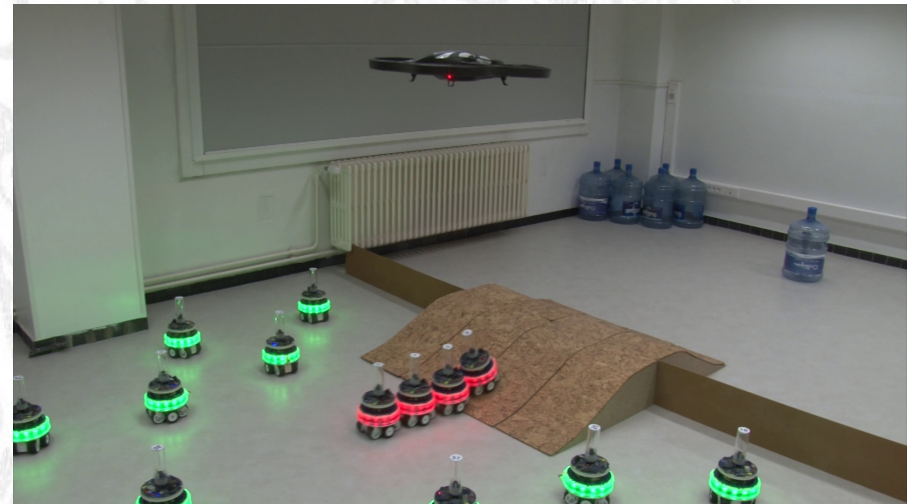
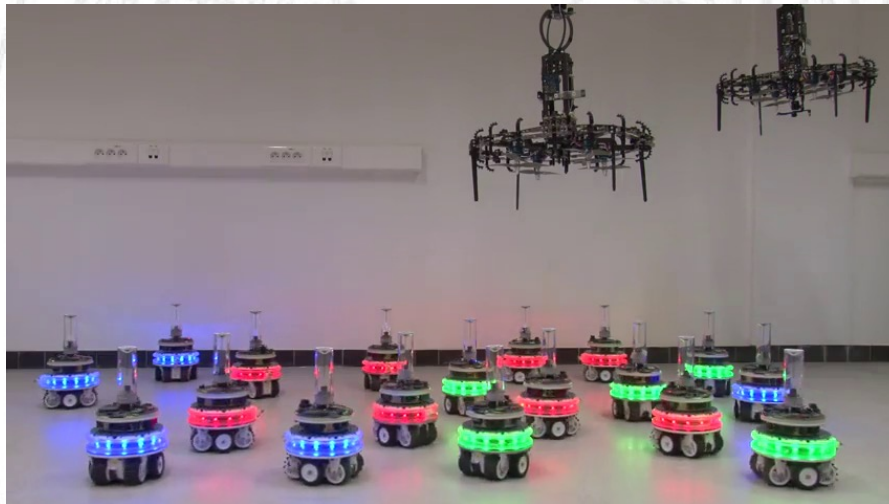


## Swarm robotics: recent results and new research directions

Swarm robotics is about designing, constructing and controlling swarms of autonomous robots that cooperate to perform tasks that go beyond the capabilities of the single robots in the swarm. In this talk, I will give an overview of research in swarm robotics in my research lab, IRIDIA, at the Université Libre de Bruxelles.

I will first present results obtained with homogeneous and heterogeneous swarms of robots that cooperate both physically and logically to perform a number of different tasks.

I will then conclude by discussing some very promising ongoing research on the self-organised formation of hierarchical control structures in a robot swarm.



**Prof. Marco Dorigo**  
Co-director of IRIDIA, AI lab - Université Libre de Bruxelles  
Directeur de Recherches du FNRS

**May 9, 3.00 pm (sharp)**  
**Aula MS1, DICAr**  
Via Ferrata, 3 – Pavia