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## **[913] The physics of locust swarms**

*Wednesday 23 August 2017 18:00 (15 minutes)*

Collective behaviour is found in wide variety of life-forms, from bacteria to humans, and it is an intriguing phenomenon with implications ranging from ecology and sociology to agriculture and artificial intelligence. I will discuss how tools from physics and machine learning can shed light on the origins and dynamics of collective motion. Specifically, I will present a model in terms of learning agents, which learn by themselves how to behave in different environments and, in the process, can develop strategies like alignment and collective sensing.

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