A.N.U. Seminar



EVOLUTION, ECOLOGY, & GENETICS RESEARCH SCHOOL OF BIOLOGY Thursday 28 April, 1pm

Collective problem solving in slime moulds, amoebas and ant colonies

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I will present research on collective problem solving in two self-organised biological systems: slime mould amoebas and ant colonies. The slime mould, *Physarum polycephalum*, is a bizarre multi-nucleate, unicellular organism. Despite lacking a brain, slime moulds are capable of surprisingly sophisticated behaviours such as solving mazes and anticipating periodic events. Ant colonies, which also lack centralised leadership, are able to accomplish intelligent-seeming feats such as building efficient transportation networks. In this talk, I will discuss three examples of collective problem solving in ant colonies and slime moulds: multi-attribute decision-making, dynamic problem solving, and finding the shortest path between points.

For further info please contact: Dr Ajay Narendra, 02 6125 4799, ajay.narendra@anu.edu.au



Seminars are held in the Gould Wing Seminar Room, Building 116 Daley Rd, ANU ALL STAFF AND STUDENTS ARE WELCOME TO ATTEND