



Australian  
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## Cooperation, resources and destruction.

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**Gould Seminar Room (Room 235)** Gould building, 116 Daley Road, ANU



Examples of cooperative behaviours, such as altruism and pacifism, may be observed in species all along the natural world, from bacteria to mammals.

However, explaining the emergence and survival of such behaviours represents a challenge for darwinian evolutionary theory, as selfish individuals benefiting from them at no cost are expected to spread in any evolving population.

In this talk I will discuss, first, how the limitation of available resources may help the evolution of pacifism in the presence of parasitic individuals, as well as coexistence between them and, second, how the destruction carried out by “joker” agents may allow for evolutionary cycles (rock-paper-scissors like) in which the population spends relevant times in cooperative states.

Presented by

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