

DANDRITE Lecture

Date: 2 June
Time: 13.30-14.30
Venue: 1871-120



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Risking your Tail: Curiosity, Danger & Exploration

Risk and reward are critical balancing determinants of adaptive behaviour.

As a special case, potential risk and potential reward, generating neophobia and neophilia, are critical balancing determinants of exploratory behaviour in the face of novelty.

There are rather great differences in how individuals engage with novelty - with substantial consequences for what they are able to learn.

Here, we consider how modern formal treatment of risk (called the conditional value at risk) and pessimistic prior expectations can model some of these differences.

Although the effects of risk on isolated decisions are well understood, additional issues arise in the context of sequences of choices, something that is inevitable in the case of exploration.

This is joint work with Kevin Shen and Chris Gagne.