

---

**SVENJA HUNTEMANN**, Mount Saint Vincent University

*Partizan ArcKayles has unbounded temperature*

Partizan ArcKayles is a game played on a simple graph in which each edge has been coloured blue or red. The two players take turn selecting an edge and removing it and all incident vertices and edges from the graph, with Left only being allowed to select blue edges and Right red edges. We will show that the temperature of Partizan ArcKayles, a measure of how urgent it is for a player to move first in a component, is unbounded even when restricted to trees. We will also discuss some potential new avenues for showing that the temperature in the game Domineering, of which Partizan ArcKayles is a generalization, is bounded above by 2, as has been long conjectured.

This is joint work with Neil McKay and Craig Tennenhouse.