# Hidden Games and Firework Thought – Insights from a Grounded Theory Study on Neurodivergent Problem Solving

## *Department Seminar*

**Monday**

**December 1, 2025**

**3:00 – 4:00 p.m.**

**Beaupre Center**
**Room 105**

Exploratory research on the experience of neurodivergent physics students shows that this population of students reports that they think about and do physics in a non-normative (different than their neurotypical peers) way. Building on this research, we are investigating exactly how neurodivergent physics students solve problems and situate it among the broader taxonomy of problem-solving. To do this, we conducted think-aloud interviews focusing on introductory mechanics with 17 neurodivergent physics undergraduates. We analyzed the data using a constructivist grounded theory method and theoretically integrated the findings through a neuroqueer literacies lens. We found four key categories regarding neurodivergent physics problem-solving: 1) Diversity of problem-solving approaches; 2) Using a nonlinear problem-solving toolbox; 3) Social stressors; and 4) Feelings of being tricked. In this talk, I present these findings and discuss implications for pedagogy and further research directions.

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