



*Invited Speaker*

Dr. François G. Dorais

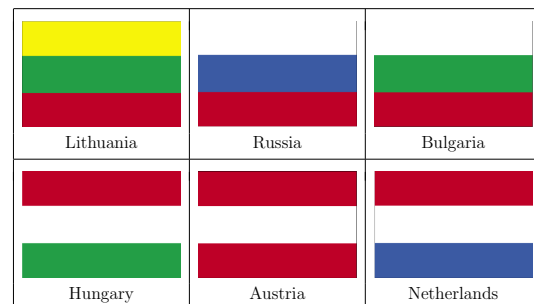
University of Vermont

“Measuring Similarity with Games”

**Monday, October 29, 2018 • Corbly Hall 105 • 4:00pm**

**Abstract**

How similar are the Lithuanian and Bulgarian flags? Is the Bulgarian more or less similar to the Hungarian flag? What about the Russian and Austrian and Dutch flags? Is there an objective way to measure the similarity between these patterns?



We will talk about a way of measuring similarity using Ehrenfeucht–Fraïssé (EF) games, which have been used in logic and model theory to distinguish mathematical theories and their associated structures. We will see how EF games can be used to measure the similarity between two flags as well as more practical everyday patterns like bar codes.

This research is joint work with a wonderful team of undergraduate students spanning over a decade: Steve Gubkin, Tom Kern, Alice Kittredge, Daniel McDonald, Patrick Mullins, Sam Pettorini, Manuel Rivera, Mike Solomon, and Chrissy Zlogar.

*A reception with light refreshments will be held in Corbly Hall  
immediately following the talk*