



COLLOQUIUM

David Duncan

Department of Mathematics

James Madison University

Triangles and Princesses and Bears! Oh My!

Friday January 29th at 3pm on Zoom

<https://csuohio.zoom.us/j/91945126460>

Bio: Prof. Duncan's research is in differential geometry, with an emphasis in gauge theory. He received his PhD from Rutgers in 2013. He held postdoctoral positions at Michigan State University, and McMaster University (where he overlapped with Cleveland State's Dr. Fred Galetto). He is now an Assistant Professor at James Madison University.

Abstract: Several years ago, a friend of mine, Ben Schmidt, came across an interesting math puzzle in an old Russian puzzle book. The puzzle involves three princesses and three bears, with the bears allowed to move according to certain rules. Upon investigating these rules, we discovered unexpectedly rich mathematical structures making connections with dynamics, mathematical biology, and even quantum mechanics! In this talk, I will describe the puzzle, its solution, and some of the math that has come out of our study.