## Central Michigan University Department of Mathematics GRADUATE STUDENT SEMINAR

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## TROPICAL GEOMETRY – AN INTRODUCTION

Tuesday, October 4, 4:00 pm - 5:00 pm Pearce Hall, Room 227

Tropical Geometry – yes. It's as cool as it sounds. Polynomials branch out like trees. Analysis becomes combinatorics. And unlike the way that a lot of sufficiently advanced Mathematics is perceived, this has some real world applications too! It was used by the economist Paul Klempener to design auctions during the financial crisis. It also has applications to optimization, transportation, and so on.

And yes. It's called *Tropical* because it comes from a warmer part of the world. It was named in honor of the Brazilian mathematician Imre Simon, who wrote on the field. Come discover what wonders such an esoteric part of Math may contain.