

# Michigan Math Club



Meeting [virtually](#) for the remainder of the Winter 2020 term, Thursdays at 4pm EDT

## Polynomials, dynamics, and trees

Becca Winarski

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The *twisted rabbit problem* is a polynomial classification problem: the goal is to determine equivalence types of functions of complex numbers that usually are not given by a formula (these are called topological polynomials). The problem arises out of complex dynamics and the first solution given by Bartholdi and Nekrashevych used group theory. I will explain the problem and its history, as well as a new topological solution - one that classifies topological polynomials using an associated tree. This is joint work with Jim Belk, Justin Lanier, and Dan Margalit.

