1142-57-134 **James Belk**, **Justin Lanier**, **Dan Margalit** and **Rebecca R Winarski*** (winarski@umich.edu). *Twisted rabbit and invariant trees.* Preliminary report.

The twisted rabbit problem is a celebrated problem in complex dynamics. Work of Thurston proves that up to equivalence, there are exactly three branched coverings of the sphere to itself satisfying certain conditions. When one of these branched coverings is modified by a mapping class, a map equivalent to one of the three coverings results. Which one?

After remaining open for 25 years, this problem was solved by Bartholdi–Nekyrashevych using iterated monodromy groups. In joint work with Belk, Lanier and Margalit, we formulate the problem topologically and solve the problem using invariant trees. (Received August 31, 2018)