EMMA SCHMIDT, University of Notre Dame
Real Monodromy Action and the 3RPR Mechanism

The algebraically-defined Galois group directly corresponds to the geometric monodromy group over the complex numbers, which studies how solutions permute along loops in parameter space. In applications, it is more useful to study the real monodromy action based on the behavior of tiered collections of real solutions. This talk will introduce an algorithm to compute real monodromy structures. As a practical example, we will explore the monodromy action of the kinematic 3RPR planar mechanism. This is a joint work with Jonathan Hauenstein, Margaret Regan, and Charles Wampler.