

1088-57-44

Satyan Devadoss* (satyan.devadoss@williams.edu) and **Jack Morava**. *Phylogenetic networks and the real moduli space of curves*.

Our story is motivated by the Deligne-Knudsen-Mumford compactification of the moduli spaces of curves. We consider the real points of these spaces, which have elegant geometric and combinatorial properties, being compact hyperbolic manifolds with a beautiful tessellation by convex polytopes. In recent years, they have gained importance in their own right, appearing in areas such as representation theory, geometric group theory, tropical geometry, and lately reinterpreted as spaces of phylogenetic networks. In particular, these real moduli spaces resolve the singularities of the spaces of phylogenetic trees studied by Billera, Holmes, and Vogtmann. (Received January 24, 2013)