

1165-14-281

Claudia Yun*, Box 1917, 151 Thayer Street, Providence, RI 02912. *The S_n -equivariant rational homology of the tropical moduli spaces $\Delta_{2,n}$.*

The tropical moduli space $\Delta_{g,n}$ is a topological space that parametrizes isomorphism classes of n -marked stable tropical curves of genus g with total volume 1. Its reduced rational homology has a natural structure of S_n -representations induced by permuting markings. In this talk, we focus on $\Delta_{2,n}$ and compute the characters of these S_n -representations for n up to 8. We use the fact that $\Delta_{2,n}$ is a symmetric Δ -complex, a concept introduced by Chan, Glatius, and Payne. The computation is done in SageMath. (Received January 19, 2021)