

Sphere complexes at the borders of outer space

Karen Vogtmann (Warwick)

1 June 2018

Abstract: Outer space is a contractible space on which the group $Out(F_n)$ of outer automorphisms of a free group acts properly but not cocompactly. Bestvina and Feighn defined a larger contractible space, called the bordification of Outer space, on which the action is both proper and cocompact. In joint work with K.-U. Bux and P. Smillie we found an equivariant deformation retract of Outer space homeomorphic to the bordification. In this talk I will interpret the boundary of this retract in terms of sphere systems in a doubled handlebody.