

Representations of braid groups

Stephen Bigelow
UC Berkeley

ABSTRACT

Braid groups were first introduced by E. Artin in 1925 as a mathematical tool for use in the textile industry. Since then they have found a wide range of applications ranging from knot theory to statistical mechanics to quantum field theory. I will talk about some maps from braid groups to matrix groups, and sketch the recent proof that one such map is injective.