Abstract

The interplay between the characteristic and resonance varieties of a group leads to new and powerful obstructions to formality and quasi-projectivity. This approach answers some questions about the geometric realizability and homological finiteness properties of various classes of groups. Applications to hyperplane arrangements, configuration spaces, right-angled Artin groups, and Bestvina-Brady groups will be given.

This is joint work with Alex Dimca and Stefan Papadima.

Refreshments will be served in the Math Library Lounge, 4:00 P.M.