

Parameters for representations of real reductive groups, combinatorial aspects

Abstract: When working with representations of real reductive groups, parameters of different kinds can be used to represent them. Because representations have various aspects, discrete as well as continuous, these parameters are necessarily somewhat complicated values. When computing with these parameters, determining Kazhdan-Lusztig-Vogan polynomials for them and ultimately deciding whether the representation they describe is unitary, combinatorial aspects are very important and often quite subtle. We intend to present various aspects of how these parameters are handled in the Atlas of Lie groups software.