**NICOLAS RESSAYRE**, Université Montpellier 2, CC51, Place Eugène Bataillon 34095, Montpellier Cedex, France Restricting representations to a reductive subgroup

Let G be a reductive subgroup of a reductive group G'. We are interested to the irreducible representation  $V(\lambda)$  of G which occurs as subrepresentation of a given irreducible representation  $V(\lambda')$  of G'. More precisely, we consider the convex cone C generated by the pairs  $(\lambda, \lambda')$  as above. In fact, these cones have numerous interpretations and a rich history. Here, we will explain how Geometric Invariant Theory allows us to give an almost minimal list of linear inequalities which characterizes C.