

September 3, 2014: Jun Yu (MIT), *Subgroups with the same spectrum.*

Given a compact Lie group G and a closed subgroup H , the dimensions of subspaces of H -invariant vectors in irreducible complex linear representations of G is called the *dimension datum* of H , which is a kind of spectral information of the subgroup. We show some invariants determined by the dimension datum, and give very different connected subgroups with the same dimension datum.