

Workshop on
**Computational Theory
of Real Reductive Groups**

July 20-24, 2009 • University of Utah

The structure of reductive algebraic groups is governed by a simple combinatorial framework, generalizing the presentation of Coxeter groups by generators and relations. This framework makes infinite-dimensional representation theory amenable to computation.

The Atlas of Lie Groups and Representations project (www.liegroups.org) looks at representation theory from this perspective. Fokko du Cloux and Marc van Leeuwen have written software (www.liegroups.org/software) to support research in the field, and to help in learning the subject.

The workshop will introduce this point of view (and the atlas software) in lecture series aimed at grad students and postdoctoral researchers with a modest background in representation theory.

- Jeffrey Adams** • Maryland • Computational theory of reductive groups
- James Arthur** • Toronto • Automorphic representation theory
- Eric Sommers** • UMass Amherst • Geometry of nilpotent orbits
- John Stembridge** • Michigan • Combinatorics of W-graphs
- Peter Trapa** • Utah • Symmetric subgroups and geometry of flag varieties
- David Vogan** • MIT • Infinite-dimensional representations

For more information visit www.liegroups.org/workshop

Organizers for both events:

- Jeffrey Adams** • University of Maryland
- Susana Salamanca** • New Mexico State University
- John Stembridge** • University of Michigan
- Peter Trapa** • University of Utah
- David Vogan** • MIT

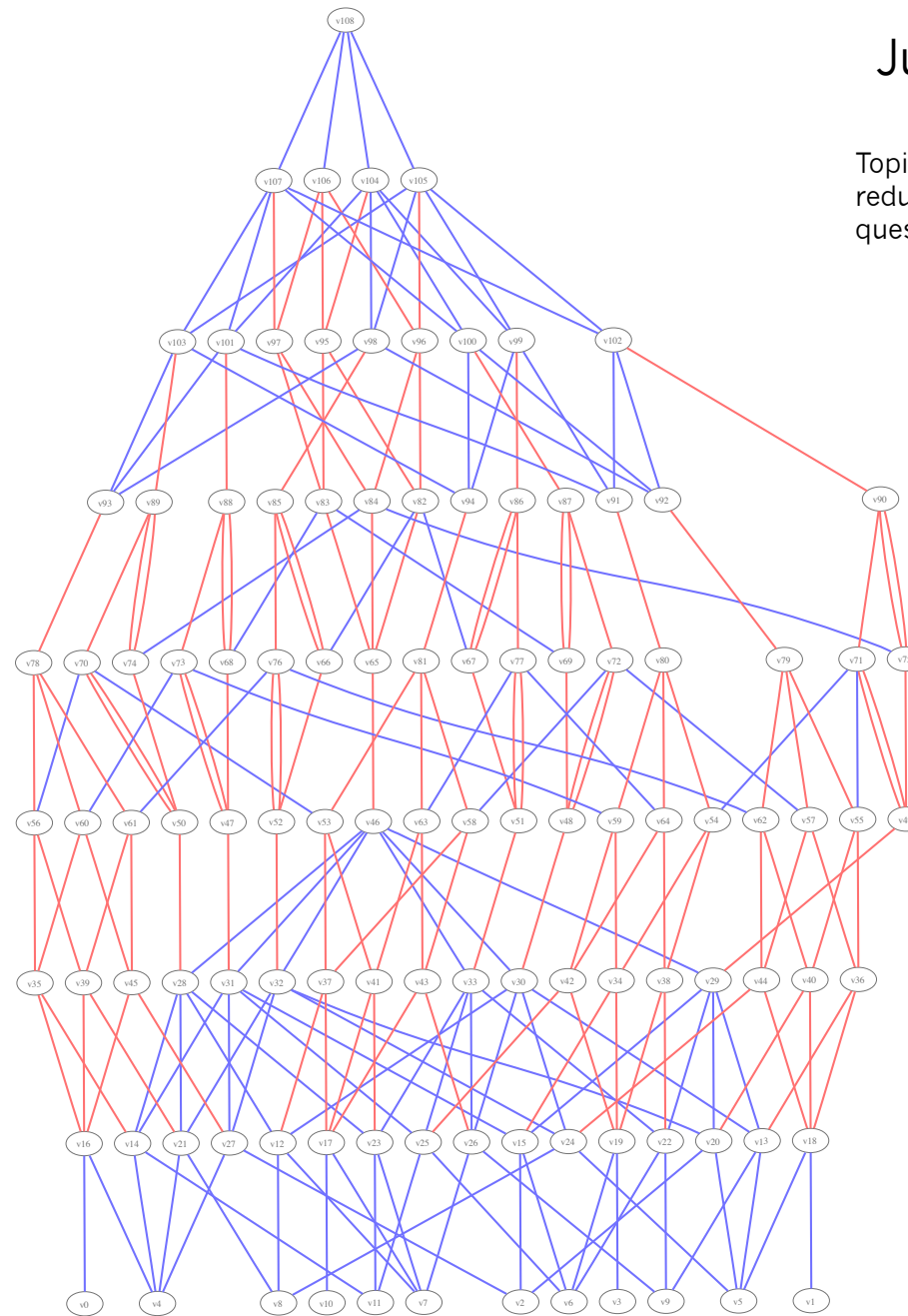
Funded in part by NSF Grant DMS-0554278, Utah's NSF-VIGRE grant, and MSRI.

Conference on
**Representation Theory
of Real Reductive Groups**

July 27-31, 2009 • University of Utah

Topics will include recent advances in representation theory of real reductive groups, including classical open problems and newer questions. Invited speakers include:

- Dan Barbasch** • Cornell
- Roman Bezrukavnikov** • MIT
- Michel Brion** • Grenoble
- Bill Casselman** • British Columbia
- Dan Ciubotaru** • Utah
- Patrick Delorme**° • Marseille
- Michel Duflo** • Paris VII
- Marketa Havlíčková** • Yale
- Roger Howe** • Yale
- Toshiyuki Kobayashi** • Tokyo
- Shrawan Kumar** • North Carolina
- Jian-Shu Li**° • Hong Kong
- Hisayosi Matumoto** • Tokyo
- William McGovern** • Washington
- Toshio Oshima**° • Tokyo
- Alessandra Pantano**° • Irvine
- Gordan Savin**° • Utah
- Wilfried Schmid** • Harvard
- Peter Trapa** • Utah
- Michèle Vergne** • École Polytechnique
- Nolan Wallach** • San Diego
- Chen-Bo Zhu** • Singapore
- °to be confirmed



For more information visit www.liegroups.org/conference