NICOLAS ARANCIBIA-**ROBERT**, Université de Paris, Cergy

SERINE BAIRAKJI, Ottawa

KRISTAPS BALODIS, University of Calgary
Representation-theoretic consequences of the geometry of Vogan varieties.

Building on the work of Zelevisnky and the cases for real and complex groups, Davis Vogan purposed a p-adic Kazhdan-Lusztig hypothesis (p-KLH): The dimensions of stalks of perverse sheaves on varieties V_λ of Langlands parameters having fixed infinitesimal parameter λ, should coincide with multiplicities of irreducible representations of infinitesimal parameter λ in standard representations. Moreover, Vogan defined what we call ABV-packets in terms of the microlocal geometry of V_λ, and purposed that these coincide with Arthur's A-packets.

We will discuss recent work which, under the assumption of the p-KLH, proves a conjecture of Gross-Prasad that an L-packet $\Pi_\phi(G)$ contains a generic representation if and only if $L(s, \phi, \mathrm{Ad})$ is regular at $s = 1$. We also discuss implications for Shahidi's enhanced genericity conjecture, and an analogue for ABV-packets. Time permitting, we may also offer some speculation as to the relationship between Arthur parameters and orbits of smooth closure.

ADÈLE BOURGEOIS, Tutte Institute for Mathematics and Computing / Carleton University
Lifting data from fixed-point subgroups

Let G be a connected reductive group over a local nonarchimedean field of residual characteristic p and set $H = (G^\Gamma)^\circ$, where $\Gamma \subset \mathrm{Aut}(G)$ is a finite group such that $\gcd(p, |\Gamma|) = 1$. The restriction of an Adler-Yu type (J, λ) to its pro-p radical is called a semisimple character in the setting of Bushnell-Kutzko-Stevens types. Given a Γ-stable datum defining a semisimple character of G, one can restrict it to a datum defining a semisimple character of H. In this talk, we will describe some of the key results involved in answering the converse question: that of lifting a datum of H into one of G. This is joint work with Monica Nevins.

MATHILDE GERBELLI-**GAUTHIER**, Toronto

JULIA GORDON, UBC

ALEX HAZELTINE, University of Michigan
Functoriality and the local theta correspondence

The Adams conjecture predicts that the local theta correspondence preserves local Arthur packets. However its reliance on local Arthur packets limits its usefulness to representations which lie in a local Arthur packet. In this talk, we remove this restriction by considering the analogue of the Adams conjecture for ABV-packets.

ZANDER KARAGANIS, Toronto

GIL MOSS, University of Maine
The universal Plancherel measure

The idea of developing the theory of intertwining operators in a general and purely algebraic way was suggested by Bernstein in unpublished notes in 1992, and further developed by Waldspurger (2003) and Dat (2005). One result of this is more general and precise versions of well-known properties of the Harish-Chandra j-function and Plancherel measure. In this talk we will discuss a further extension of this theory resulting in a "universal" Plancherel measure defined over the Bernstein variety, which interpolates the classical Plancherel measure at each supercuspidal support. The results are not only for complex coefficients, but also hold in the context of "families," where the coefficients are rings. We will outline how it can be used to characterize a putative local Langlands correspondence in families.

ISABELLA NEGRINI, Toronto

MISHTY RAY, Carleton

HADI SALMASIAN, Ottawa

LOREN SPICE, Texas Christian University
Fixed points under quasisemisimple and locally quasisemisimple actions

The notion of quasisemisimplicity is a generalization of semisimplicity, due to Steinberg, that allows us to describe nicely behaved outer automorphisms. The geometric behaviour of fixed-point groups under a single quasisemisimple automorphism was first investigated by Steinberg. In joint work with Adler and Lansky, we investigated generalisations in several directions: first, dealing with the rational theory (over a non-algebraically closed base field); second, dealing with the jointly quasisemisimple actions; and, third, dealing with the more general class of locally quasisemisimple actions. In this talk, we will try to give the flavour of this third generalisation, including how it turns out to involve surprisingly deep results in the theory of abstract finite groups.

The work being described has as its motivation lifting results by Adler and Lansky for finite groups of Lie types, and hence of depth-zero Moy–Prasad types, but the talk will focus almost exclusively on the structure theory.

EKTA TIWARI, Ottawa

TIAN AN WONG, Michigan