Irreducible Non-supercuspidal Representations of GSp(4, F)



• Non-generic representations with support in the Borel subgroup

- Generic representations with support in the Borel subgroup
- Non-generic representations with support in the Klingen parabolic subgroup
- Generic representations with support in the Klingen parabolic subgroup
- Non-generic representations with support in the Siegel parabolic subgroup
- Generic representations with support in the Siegel parabolic subgroup
- Supercuspidal representations

A • in the P-box means that the representation appears as a local component in cusp forms that are CAP with respect to P. A \circ in the P-box means that the representation appears a a local component in non-cuspidal liftings from $PGL(2) \times PGL(2)$. Similarly for the B and Q boxes. A \odot means that the representation is unitary if and only if all of the free inducing data (i.e., $\chi_1, \chi_2, \sigma, \chi$ or π) has exponent 0. A \oplus + means that the representation is unitary if and only if the free inducing data has exponent 0, or that some of the free inducing data does not have exponent 0 and satisfies certain conditions. These conditions appear in a box with the + symbol. It is assumed that the GL inducing data has been put into standard position, i.e., has non-negative exponents in descending order. An additional unstated condition is that the central character of the representation be unitary. A the representation is non-unitary for all choices of the free inducing data. This poster is based on the work by P. Sally and M. Tadić, Induced representations and classifications for GSp(2, F) and Sp(2, F), Société Mathématique de France, Mémoire 52 (1993), 75–133. The poster was produced by Brooks Roberts and Ralf Schmidt. See gsp4.org for more information. (07/2006)

Supercuspidal



Tempered if and only if free inducing data is unitary

Non-tempered

Quotients of the inducing data

Supercuspidal inducing data

L-packet