

Parabolic Positivity

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We will classify all the flag manifolds G/P (P is a parabolic subgroup of a Lie group G) where a natural notion of positivity appears for triples in G/P . The classification involves only combinatorial data extracted from the Dynkin diagram of G . Parabolic positivity includes both the total positivity à la Lusztig for complete flags in \mathbf{R}^n and positivity in the Lagrangian manifold of a symplectic vector space (maximal triples). However we will concentrate on the more exotic case associated with rank 3 Jordan algebras. This is a joint work with François Labourie and Anna Wienhard.