

**Positivity in Lie groups and spaces of positive representations**  
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Abstract: We will give different approaches (algebraic, geometric) to define what is a positive structure on a flag variety. This in turn enables one to introduce the notion of positive representations and we will review the basic properties (openness, sometimes closedness, parametrization, ...). This talk is based on collaborative works with Anna Wienhard, François Labourie, Daniele Alessandrini, Eugen Rogozinnikov.