# talk 23-11-2021 MALGA title and abstract

#### Francesco Esposito

### November 2021

### 1 Title

"Motzkin combinatorics for linear degenerations of flag varieties"

## 2 Abstract

Linear degenerations of flag varieties are projective varieties with representation-theoretic relevance initially defined and studied by Cerulli Irelli, Feigin, Fang, Fourier and Reineke. They correspond to particular quiver Grassmannians for a quiver of type A. Recently, the topology of the family of linear degenerations has been studied by Fang and Reineke, revealing an interesting and unexpected connection between the supports of the family of linear degenerations and the combinatorics of Motzkin paths.

In this talk, I relate on ongoing joint work with Giovanni Cerulli Irelli and Mario Marietti, in which we give another combinatorial characterization of such supports and explain the above mentioned connection through a universal property.