

Marvin Hahn

Mustafin degenerations - A tropical interface for the degeneration of flag varieties

Mustafin degenerations are degenerations of flag varieties induced by point configurations in Bruhat-Tits buildings. These objects were first introduced in the 70s by Mustafin for the special case of degenerations of projective spaces. This was done in the context of generalising Mumford's seminal work on the uniformisation of curves to higher dimension. In recent years there has been newfound interest in these objects starting with pioneering work of Cartwright, Häbich, Sturmfels and Werner, connecting these degenerations to tropical hyperplane arrangements. In this talk, we review recent developments regarding Mustafin degenerations of flag varieties and outline new connections to computer vision, limit linear series, the p -adic Simpson correspondence...etc