

# Null hyperpolygons and quasi-parabolic Higgs bundles

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Hyperpolygons spaces are a family of hyperkähler manifolds, that can be obtained from coadjoint orbits by hyperkähler reduction. Jointly with L. Godinho, we showed that these spaces are isomorphic to certain families of parabolic Higgs bundles, when a suitable condition between the parabolic weights and the spectra of the coadjoint orbits is satisfied.

In analogy to this construction, we introduce two moduli spaces: the moduli spaces of quasi-parabolic  $SL(2, \mathbb{C})$ -Higgs bundles over  $\mathbb{CP}^1$  on one hand and the null hyperpolygon spaces on the other, and establish an isomorphism between them.

Finally we describe the fixed loci of natural involutions defined on these spaces and relate them to the moduli space of null hyperpolygons in the Minkowski 3-space.