



CENTRO DE
MATEMÁTICA
UNIVERSIDADE DO PORTO

GEOMETRY AND TOPOLOGY SEMINAR

Singular fibres of the symplectic and odd orthogonal Hitchin system

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Abstract. Hitchin systems are algebraically completely integrable systems foliating a dense subset of Higgs bundle moduli spaces by abelian torsors. This structure played a crucial role in recent developments in the field, e. g. Langlands duality and the GMN-conjecture. In this talk, we take a closer look at degenerate fibres of the symplectic and odd orthogonal Hitchin system. We give a new approach identifying a certain class of these fibres with $SL(2, \mathbb{C})$ -Hitchin fibres of twisted Higgs bundles. This allows to study these degenerated Hitchin fibres by semi-abelian spectral data - a generalisation of the abelianisation procedure for regular Hitchin fibres introducing Hecke modifications at the singularities of the spectral curve.

FRIDAY, JANUARY 15

16H30 (WET/GMT)

Zoom link: <https://videoconf-colibri.zoom.us/j/87115597362?pwd=aVBsR3ZGWXFEdW5a2d1b1dadG9uUT09>
Password: CMUP_GT

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