

GEOMETRY & PHYSICS SEMINAR

22 junho | 11:00 | sala 6.2.33

Serre polynomials of Character Varieties of free groups

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Abstract:

With G a complex reductive group, let $X_r(G)$ denote the G -character varieties of free group F_r , of rank r . In this talk we shall present a result showing that the mixed Hodge structures on the cohomology groups of $X_r(SL_n)$ and $X_r(PGL_n)$, and on the compactly supported cohomology groups of the irreducible loci are isomorphic, for any $n, r \in \mathbb{N}$. In particular, this implies their Serre (also called E-) polynomials coincide, settling the question raised by Lawton-Muñoz. This is based on joint work with Carlos Florentino and Alfonso Zamora.

CMAFclO



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