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Abstracts of Short Communications and Posters

Section:

4. Algebraic Geometry

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Izadi, Elham, University of Georgia, USA, and van Geemen, Bert, University of Pavia, Italy

An embedding of a moduli space of vector bundles

Let C be a compact Riemann surface. Seshadri defined the moduli space M of semi-stable vector bundles of rank 2 and trivial determinant over C. The ample generator L of the Picard group of M defines a natural morphism Δ to a linear system of divisors on the jacobian of C. The dimensions of the spaces of the powers of L have been calculated by the Verlinde formulas. In a joint work with van Geemen, we complete the last step of a proof that Δ is an embedding if C is non-hyperelliptic of genus at least 4. We also give a geometric characterization of the embedded tangent spaces to $\Delta(M)$ at its singular points.