On a family of surfaces with $p_g = q = 2$ and $K^2 = 7$

Matteo Penegini

Università di Genova

penegini@dima.unige.it

Roberto Pignatelli Università di Trento roberto.pignatelli@unitn.it

In this talk we shall study a family of surfaces of general type with $p_g = q = 2$ and $K^2 = 7$, originally constructed by C. Rito. We provide an alternative construction of these surfaces, that allows us to describe their Albanese map and the corresponding locus \mathcal{M} in the moduli space of the surfaces of general type. In particular we prove that \mathcal{M} is an irreducible component, two dimensional and generically smooth.