ICM 1998, Berlin, Aug. 18–27

Abstracts of Short Communications and Posters

Section:

4. Algebraic Geometry

1991 MS Classification: 14
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Plurianonical maps of two general type threefolds with $\mathbf{p_g = 0}$
Let X be a non-singular algebraic threefold obtained as desingularization of a degree six hypersurface $V_6 \subset \mathbb{P}^4_{\mathbb{C}}$.
Let us consider two different singularities on V_6:
I) triple point with infinitely near triple curve;
II) triple point with infinitely near double surface.
If we impose on V_6 five singularities of type I) in a suitable position, from the theory of canonical and pluricanonical adjoints to V_6, we obtain a general type threefold X having $q_1 = q_2 = p_g = 0, P_2 = 5$, canonical divisor K_X not simultaneously big and nef, $\varphi_{|2K_X|}$ birational.
If we impose on V_6 five singularities of type II) in a suitable position, we obtain a general type threefold having the same properties of the above threefold except $P_2 = 1$ and $\varphi_{|mK_X|}$ birational iff $m \geq 11$.