

Dloussky, Georges

From non-Kählerian surfaces to Cremona group of $\mathbb{P}^2(\mathbb{C})$. (English) Zbl 1320.32022
Complex Manifolds 1, 1-33 (2014).

Summary: For any minimal compact complex surface S with $n = b_2(S) > 0$ containing global spherical shells (GSS) we study the effectiveness of the $2n$ parameters given by the n blown up points. There exists a family of surfaces $\mathcal{S} \rightarrow B$ with GSS which contains as fibers S , some Inoue-Hirzebruch surface and non minimal surfaces, such that blown up points are generically effective parameters. These families are versal outside a non empty hypersurface $T \subset B$. We deduce that, for any configuration of rational curves, there is a non empty open set in the Oeljeklaus-Toma moduli space such that the corresponding surfaces are defined by a contracting germ in Cremona group, in particular admit a birational structure.

MSC:

32J15 Compact complex surfaces

Cited in 7 Documents

Keywords:

compact complex surfaces; global spherical shells; Inoue-Hirzebruch surfaces

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