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Uniformisation of higher-dimensional minimal varieties. (English) [Zbl 1446.32019]


Summary (arXiv): After a historical discussion of classical uniformisation results for Riemann surfaces, of problems appearing in higher dimensions, and of uniformisation results for projective manifolds with trivial or ample canonical bundle, we introduce the basic technical concepts and sketch the ideas of the proofs for recent uniformisation theorems for singular varieties obtained by the authors in collaboration with Thomas Peternell.

For the entire collection see [Zbl 1392.14001].

MSC:

32Q30 Uniformization of complex manifolds
14E05 Rational and birational maps
32Q26 Notions of stability for complex manifolds
14E20 Coverings in algebraic geometry
14E30 Minimal model program (Mori theory, extremal rays)
53B10 Projective connections
53C07 Special connections and metrics on vector bundles (Hermite-Einstein, Yang-Mills)
14C15 (Equivariant) Chow groups and rings; motives
14C17 Intersection theory, characteristic classes, intersection multiplicities in algebraic geometry
14M05 Varieties defined by ring conditions (factorial, Cohen-Macaulay, semi-normal)

Full Text: DOI arXiv