ARITHMETIC AND GEOMETRY OF ALGEBRAIC SURFACES (MS - ID 45)

Rigid complex manifolds via product quotients

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Product quotients give rise to a large class of varieties equipped with a lot of symmetry. They are particularly useful as a tool to provide examples of complex manifolds with special properties. In this talk I will explain how to construct in each dimension dimension n (at least three) an example of a rigid n-manifold of Kodaira dimension one, as a resolution of a singular product quotient. Their existence was conjectured by I. Bauer and F. Catanese and constructed in a joint project with I. Bauer.