



Acyclic embeddings of open Riemann surfaces into new examples of elliptic manifolds

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The geometric notion of ellipticity for complex manifolds was introduced by Gromov in his seminal 1989 paper on the Oka principle, and is a sufficient condition for a manifold to be Oka. In the current paper we present contributions to three open questions involving elliptic and Oka manifolds. We show that quotients of C^n by discrete groups of affine transformations are elliptic. Combined with an example of Margulis, this yields new examples of elliptic manifolds with free fundamental groups and vanishing higher homotopy. Finally we show that every open Riemann surface embeds acyclically into an elliptic manifold, giving a partial answer to a question of Larusson.

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