



# Automorphism groups of Calabi-Yau manifolds of Picard number two

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(Submitted on 8 Jun 2012 (v1), last revised 18 Jun 2012 (this version, v2))

We prove that the automorphism group of an odd dimensional Calabi-Yau manifold of Picard number two is always a finite group. This makes a sharp contrast to the automorphism groups of K3 surfaces and hyperkahler manifolds and birational automorphism groups, as we shall see. We also clarify the relation between finiteness of the automorphism group (resp. birational automorphism group) and the rationality of the nef cone (resp. movable cone) for a hyperkahler manifold of Picard number two. We will also discuss a similar conjectural relation together with existence of rational curve, expected by the cone conjecture, for a Calabi-Yau threefold of Picard number two,

Comments: 16 printed pages, two more references are added

Subjects: **Algebraic Geometry (math.AG)**

Cite as: **arXiv:1206.1649 [math.AG]**

(or **arXiv:1206.1649v2 [math.AG]** for this version)

## Submission history

From: Keiji Oguiso [[view email](#)]

[v1] Fri, 8 Jun 2012 02:08:57 GMT (17kb)

[v2] Mon, 18 Jun 2012 05:58:46 GMT (17kb)

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