

## **Classification of Kähler homogeneous manifolds of non-compact dimension two**

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**Abstract.** Suppose  $G$  is a connected complex Lie group and  $H$  is a closed complex subgroup such that  $X := G/H$  is Kähler and the codimension of the top non-vanishing homology group of  $X$  with coefficients in  $\mathbb{Z}_2$  is equal to two. We show that such an  $X$  has the structure of a holomorphic fiber bundle whose fiber and base are constructed from certain “basic building blocks”, *i.e.*,  $\mathbb{C}$ ,  $\mathbb{C}^*$ , Cousin groups, and flag manifolds.

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