

## **Fano manifolds whose elementary contractions are smooth $\mathbb{P}^1$ -fibrations: a geometric characterization of flag varieties**

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**Abstract.** The present paper provides a geometric characterization of complete flag varieties for semisimple algebraic groups. Namely, we show that if  $X$  is a Fano manifold whose elementary contractions are all  $\mathbb{P}^1$ -fibrations then  $X$  is isomorphic to the complete flag manifold  $G/B$ , where  $G$  is a semi-simple Lie algebraic group and  $B$  is a Borel subgroup of  $G$ .

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