

Potential density for some families of homogeneous spaces

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Abstract. For a smooth, projective family of homogeneous varieties defined over a number field, we show that if potential density holds for the rational points of the base, then it also holds for the total space. A conjecture of Campana and Peternell, known in dimension at most 4 and for certain higher dimensional cases, would then imply potential density for the rational points of smooth projective varieties over number fields whose tangent bundle is nef.

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