

# Pseudo-metric preserving Anosov Actions

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We propose the study of Anosov action of  $\mathbb{R}^k$  with smooth invariant bundles and which preserves a pseudo-Riemannian metric  $g$ . On this talk, we show that under some circumstances, this action is conjugate to an affine action on a homogeneous space  $\Gamma \backslash G/H$ . This is a partial extension of Y. Fang's ([1]) work on flows and represents one more step towards Kalinin-Spatzier's ([2]) conjecture on the algebraicity of abelian Anosov actions of higher rank.

## References

- [1] Y. FANG, *Geometric Anosov flows of dimension 5*, Comptes Rendus Mathematique, 336(5), 2003, 419–422
- [2] B. KALININ AND R. SPATZIER, *On the Classification of Cartan Actions*, GAFA, Geom.funct. anal.17(2), 2007, 468–490