Ricci flow of $G2$-type real flag manifolds

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A real flag manifold is a quotient space $\mathbb{F} = G/P$, where G is a connected Lie group with non-compact real simple associated Lie algebra $\mathfrak{g}$, and P is a parabolic subgroup of G. In [1], ee investigate homogeneous Riemannian geometry on real flag manifolds of the split real form of $\mathbf{g}_2$. We characterize the metrics that are invariant under the action of a maximal compact subgroup of G2 and we explore the Ricci flow for the case where the isotropy representation has no equivalent summands, employing techniques from the qualitative theory of dynamical systems. This is joint work with Brian Grajales and Gabriel Rondon.

References

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