Formality of Positive Quaternion Kähler Manifolds

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Positive Quaternion Kähler Manifolds are Riemannian manifolds with holonomy contained in $\mathbf{Sp}(n)\mathbf{Sp}(1)$ and with positive scalar curvature. Conjecturally, such a manifold is a symmetric space. Recently, Positive Quaternion Kähler Geometry has become a rather popular field of study featuring a variety of different methods.

After reviewing some known properties I shall offer a new approach via Rational Homotopy Theory which will reveal yet another analogy between Positive Quaternion Kähler Manifolds and symmetric spaces.