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Classification of 8-Dimensional Compact Projective Planes

Let \mathcal{P} be a compact, 8-dimensional projective plane and Δ a connected closed subgroup of $\text{Aut } \mathcal{P}$. If Δ is semi-simple or has a normal torus subgroup, and if $\dim \Delta > 13$, then \mathcal{P} is a Hughes plane.

Keywords: Compact projective planes, Lie collineation group, Hughes plane, Baer subplane.

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