

Mateo Galdeano

The heterotic G_2 system on 3- (α, δ) -Sasakian manifolds

The heterotic G_2 system describes compactifications of heterotic supergravity on a 7-dimensional manifold preserving $\mathcal{N} = 1$ supersymmetry. Solutions to the system involve interesting constructions in geometry—such as G_2 -instantons or conformally co-closed G_2 -structures—but they are challenging to obtain. This poster introduces new solutions to the heterotic G_2 system on a class of manifolds known as 3- (α, δ) -Sasakian manifolds. This poster is based on joint work with Leander Stecker (soon to appear on arXiv).