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Flux vacua on $SU(4)$ -deformed Stenzel space

I will discuss $\mathcal{N} = (1, 1)$, $d = 2$ IIA flux vacua on manifolds with $SU(4)$ -structure, a class which includes Calabi-Yau (CY) manifolds. The Stenzel space fourfold is a non-compact CY which is a higher-dimensional analogue of the deformed conifold. By deforming the CY-structure on Stenzel space, families of $SU(4)$ -structures with torsion can be constructed. I will discuss vacua on smooth complete non-CY spaces constructed in this fashion. Such vacua are sourced by a distribution of NS5-branes, which has consequences for the integrability of the Killing spinor equations.