

# Extremal Kähler metrics on (blown-down) 6-manifolds

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## **Abstract**

In this talk we will construct some extremal Kähler metrics on  $\mathbb{C}P^2$  bundles over compact Riemann surfaces. We will assume that the metric admits a Hamiltonian 2-form of order one, but instead of compactifying in a fashion that yields metrics on  $\mathbb{C}P^1$  bundles, we will blow-down one end and obtain metrics on  $\mathbb{C}P^2$  bundles. The talk is based on joint work with Vestislav Apostolov, David Calderbank, and Paul Gauduchon.