

**EXTREMAL METRICS ON PROJECTIVE BUNDLES  
OVER A CURVE, I**

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ABSTRACT: This talk is mainly devoted to giving a direct proof of the following theorem: Let  $M = \mathbb{P}(E)$  be the total space of a projective bundle over a compact complex curve; then,  $M$  admits a Kähler metric of constant scalar curvature if and only if the complex vector bundle  $E$  is polystable. This, as well as the companion talk by V. Apostolov, is based on a joint work with V. Apostolov, D. Calderbank and C. Tønnesen-Friedman.