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**Gordon Heier** (heier@math.uh.edu) and **Fangyang Zheng** (zheng.31@osu.edu). *Metrics of  
Positive Holomorphic Sectional Curvature on Projectivized Vector Bundles*. Preliminary report.

In 1975, N. Hitchin proved that the Hirzebruch surfaces  $\mathbb{F}_n = \mathbb{P}(\mathcal{O}_{\mathbb{P}^1}(n) \oplus \mathcal{O}_{\mathbb{P}^1})$ ,  $n \geq 0$ , admit (Hodge) metrics of positive holomorphic sectional curvature  $K$ . In this talk, I will determine explicit pinching constants  $c, C$  such that  $c \leq K \leq C$  for these metrics. I will also discuss the curvature and pinching constants of projectivized vector bundles of arbitrary rank over compact Kähler manifolds, as well as some further generalizations. (Received September 10, 2015)