Vestislav Apostolov and David M. J. Calderbank, 12308, and Paul Gauduchon and Christina W Tønnesen-Friedman\* (tonnesec@union.edu), Department of Mathematics Union College, Union College, Schenectady, NY 12308. Classification of Extremal Kähler Metrics on Ruled Complex Surfaces.

In this talk I will cover some recent results (from joint work with V. Apostolov, D. Calderbank, and P. Gauduchon) on extremal Kähler metrics on so-called admissible projective bundles. I will focus on the particular case of a geometrically ruled complex surface, where we now have complete answers to some long-standing questions. These questions (and answers) may be viewed as a motivator for the more generalized studies. (Received January 20, 2006)