1005-53-49 **Vestislav Apostolov**, **David M. J. Calderbank**, **Paul Gauduchon** and **Christina W Tønnesen-Friedman*** (`tonnesec@union.edu`), Department of Mathematics, Union College, Schenectady, NY 12308. *Extremal Kähler metrics with hamiltonian* 2-*forms.*

This talk will present some existence and non-existence examples of constant scalar curvature (CSC) and, more generally, extremal Kähler metrics. We will work on the total space of a certain type of projective bundle and make the assumption that the metric also admits a so-called hamiltonian 2-form.

The examples tie in nicely with recent results and conjectures on the equivalence of CSC existence with stability. (Received January 21, 2005)