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Gideon Maschler* (gmaschler@clarku.edu), Department of Mathematics & Computer Science, Clark University, Worcester, MA 01606. *Distinguished metrics conformal to Kähler metrics*. Preliminary report.

Under what conditions is a Kähler metric g conformal to a distinguished Riemannian metric \hat{g} ? We discuss positive, and partial negative answers to this question for various metric types, requiring \hat{g} to be either Einstein, a gradient Ricci soliton or quasi-Einstein in the sense of Case, Shu and Wei. (Received August 30, 2009)