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Tim Ferguson* (tjferguson1@ua.edu), Department of Mathematics, The University of Alabama, Box 870350, Tuscaloosa, AL 35487-0350. *The p -Harmonic Equation and Extremal Problems in Bergman Spaces.*

We discuss linear extremal problems for Bergman spaces of analytic functions and their relation to the complex analogue of the p -harmonic equation. Khavinson and Stessin used this relation to derive a regularity result for extremal problems with polynomial kernels. We discuss their result and its applications to a recent result of ours dealing with another aspect of regularity for extremal problems. (Received January 30, 2015)