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John M. Neuberger* (john.neuberger@nau.edu), Department of Mathematics and Statistics, Box 5717, NAU, Flagstaff, AZ 86011. *A reduction minimax algorithm for the nonlinear deflation of sublinear and superlinear elliptic BVP.* Preliminary report.

We present a reduction minimax algorithm for approximating a sequence of solutions of increasing Morse index to sublinear and superlinear elliptic boundary value problems. The algorithm is phrased as a pair of conjectures, whereby the solutions are produced as the minimums of the action functional on a nested sequence of maximizing subsets. (Received September 08, 2016)