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An iterative minimization scheme for saddle search XIANG ZHOU,

Department of Mathematics, City University of Hong Kong — The gentlest ascent dynamics (E and ZHOU, 2011 *Nonlinearity*) transforms saddles of energy potential into a stable fixed point. Inspired by GAD, in this talk, I introduce a new formulation of iteratively minimizing a sequence of modified potential to find the saddles of the original function. We show that the iteration converges quadratically. An 175-atom example is illustrated as an application. This is the joint work with Weiguo Gao and Jing Leng.

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