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Alexander G Ramm. *Dynamical Systems Method for Solving Ill-conditioned Linear Algebraic Systems.* Preliminary report.

A new method, the Dynamical Systems Method (DSM), justified recently, is applied to solving ill-conditioned linear algebraic system (ICLAS). The DSM gives a new approach to solving a wide class of ill-posed problems. In this paper a new iterative scheme for solving ICLAS is proposed. This iterative scheme is based on the DSM solution. An a posteriori stopping rules for the proposed method is justified. (Received September 22, 2010)