1120-90-176 Elaheh Gorgin* (elaheh.gorgin@minotstateu.edu), 311 Model Hall, 500 University Avenue West, Minot, ND 58707. A new parameter choice approach for Tikhonov Regularization Method-finite dimensional linear inverse problems. Preliminary report.

Inverse problems arise in many branches of science and engineering. Tikhonov regularization is one of the most convenient regularization methods for dealing with linear inverse problems. This method needs a regularization parameter and the quality of the computed solution depends on how good the regularization parameter is. In this work, we introduce a new parameter selection method for Tikhonov regularization method, present some initial results and compare the performance of this method with the previous convenient parameter choice strategies. (Received February 21, 2016)