962-65-681

Charles W Groetsch^{*} (groetsch[@]uc.edu), P.O. Box 210037, University of Cincinnati, Cincinnati, OH 45221-0037, and Otmar Scherzer, Institut fuer Mathematik, Universitaet Bayreuth, D95440 Bayreuth, Germany. A nonstationary iterated Tikhonov-Morozov method.

The convergence of a nonstationary iterated version of the Tikhonov-Morozov method for stable evaluation of unbounded linear operators is discussed. An a priori stability condition is established and an a posteriori parameter choice strategy is devised that does not suffer from the saturation limitation of the ordinary Tikhonov-Morozov method. (Received September 20, 2000)