1077-65-1506 Sergei Pereverzev* (sergei.pereverzyev@oeaw.ac.at), Johann Radon Institute (RICAM), Altenbergerstrasse, 69, 4040 Linz, Austria. Recent trends in Multi-parameter Regularization.

We are going to discuss recent developments in multi-parameter regularization. We will consider the schemes with several a priori given penalty terms as well as the schemes with adaptively chosen penalty. New regularization multi-parameters choice rules will be proposed and analyzed. Moreover, numerical illustrations from several application areas will be demonstrated. (Received September 20, 2011)