1077-65-1315   **Bernd Hofmann*** (`hofmannb@mathematik.tu-chemnitz.de`), Chemnitz University of Technology, Department of Mathematics, Reichenhainer Str. 39/41, Chemnitz, Germany. *Expressions of smoothness in regularization.*

The talk presents a couple of new results on the role of smoothness and source conditions for Tikhonov type regularization in Banach spaces. Also motivated by some aspects of sparsity alternative variational inequalities and appropriate error measures are required for finding convergence rates results. (Received September 19, 2011)