



**Detelin Dosev** (dosev@neo.tamu.edu), Department of Mathematics, Texas A&M University, College Station, TX 77843, USA, *Commutators on some classical Banach spaces*.

ABSTRACT. In this talk a classification of the commutators on  $\ell_p$  and  $L_p$ ,  $1 \leq p \leq \infty$ , will be given. We will show that the commutators on  $X$  for  $X = \ell_p$  or  $X = L_p$ ,  $1 \leq p \leq \infty$ , are the operators not of the form  $\lambda I + K$  where  $\lambda \neq 0$  and  $K$  is an operator in the largest ideal in  $L(X)$ . The main steps for proving these results will be outlined and applications to other Banach spaces will be presented as well. The results are based on a joint work with W. B. Johnson and G. Schechtman.