

1129-46-416

**Jan Lang\***, Department of Mathematics, The Ohio State University, 231 West 18th Avenue, Columbus, OH 43210-1174, and **D E Edmunds**. *Series representation of compact linear operators in Banach spaces.*

Let  $T : X \rightarrow Y$  be a compact map between uniformly convex and uniformly smooth Banach spaces. When  $X$  and  $Y$  are Hilbert spaces then E. Schmidt result guaranties that  $T$  can be represent in form of series, i.e.  $Tf(x) = \sum \alpha_Y(x)y_n$  where  $\alpha_Y \in Y^*$  and  $y_n \in Y$ . From Enflo's result follows that such representation of the compact map  $T$  is, generally, not possible on Banach spaces. In this talk we will discuses conditions under which we can obtain Banach-space version of the well-known Hilbert-space result of E. Schmidt (talk is based on joint papers with D.E.Edmunds). (Received March 20, 2017)