1042-47-8 **Drissi Drissi*** (`drissi@sci.kuniv.edu.kw`), Department of Mathematics & Computer Science, Kuwait University, P.O. Box 5969, safat13060 Kuwait, Kuwait. *r-commuting operators and Deddens' algebra.* Preliminary report.

Given a bounded invertible operator A on a complex Banach space X. Let S_A be the set of operators T for which $\sup_{n \geq 0} \|A^n T A^{-n} - A^{-n} T A^n\| < \infty$. It is shown, in the non-trivial case when $A \neq A^{-1}$, that if the spectrum of T has empty interior then $S_A = \{A\}'$. This improves former results of Deddens-Williams. As applications, we obtain characterizations on the solutions T of operator equations $AT = rTA$, and other results on the r-commuting operators. (Received May 27, 2008)