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**Claus Michael Ringel** and **Markus Schmidmeier\*** (markus@math.fau.edu). *Endostructure and Stackability of Nilpotent Linear Operators.*

We consider triples  $X = (V, U, T)$  consisting of a finite dimensional vector space  $V$ , a nilpotent linear operator  $T : V \rightarrow V$  of nilpotency index at most six and a subspace  $U$  of  $V$  which is invariant under the action of  $T$ .

Call an indecomposable triple  $X$   $m$ -stackable if there is a chain of inflations between triples

$$0 = Y_0 \rightarrow Y_1 \rightarrow \cdots \rightarrow Y_m = Y$$

with  $Y$  indecomposable and all subsequent factors isomorphic to  $X$ .

Surprisingly, an innocent invariant of the indecomposable triple  $X$ , namely the dimension pair  $(v, u)$  where  $v = \dim V$ ,  $u = \dim U$ , allows precise statements about endostructure and stackability of  $X$ . In particular, if  $(v, u)$  is an integer multiple of  $(12, 6)$  then  $X$  is  $m$ -stackable for every natural number  $m$ . But if  $(v, u)$  is not a multiple of  $(2, 1)$  and  $X$  is  $m$ -stackable then  $m \leq 6$ . (Received February 26, 2007)