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Justyna Kosakowska* (justus@mat.umk.pl), Faculty of Mathematics and Computer Science, Nicolaus Copernicus University, 87-100 Torun, Poland. *Combinatorial and geometric aspects of invariant subspaces of linear operators.*

Some algebraic and geometric properties of invariant subspaces of linear operators can be controlled by combinatorial tools (Littlewood-Richardson tableaux, arc diagrams, Hall polynomials). We are interested in short exact sequences of nilpotent linear operators and their algebraic and geometric properties. A combinatorial analysis involving arc diagrams and Littlewood-Richardson tableaux yields a description of properties we are interested in. This talk is an elementary excursion through these problems.

This is a talk about a joint project with Markus Schmidmeier from Florida Atlantic University. (Received February 09, 2014)