MATJAZ OMLADIC, University of Ljubljana, Dept. of Math., Jadranska 19, SI-1000 Ljubljana, Slovenia Semigroups of matrices satisfying commutator equations

Some recently obtained reducibility results for matrix semigroups satisfying certain polynomial relations such as commutator relations will be discussed. For example, we will consider semigroups such that there is a matrix (not necessarily a member of the semigroup) with the property that the commutator with every member of the semigroup is nilpotent.