

Marina Avitabile is assistant professor in Algebra at the Department of Mathematics of the University of Milano-Bicocca since 1.06.2006. She has obtained her PhD at the University of Trento in 1999 with the dissertation *Some loop algebras of Hamiltonian Lie algebras*, advisor Prof. A. Caranti. She has been fellow at Indam (Istituto Nazionale di Alta Matematica *F. Severi*), at the Department of Mathematics of the University of L'Aquila and at the Department of Mathematics of the University of Regensburg.

Scientific interests.

The main topic in her scientific activity is the study of modular, graded Lie algebras which satisfy certain *narrowness conditions* on the lattice of their graded ideals. This research arises from the theory of pro p -groups of finite coclass, developed by Leedham-Green, Newman, Shalev and Zelmanov and from the further extensions and generalizations of the coclass theory. The class of groups under consideration contains objects that have attracted remarkable interest such as the Nottingham group. The invariants introduced for pro p -groups can be naturally reformulated for the associated Lie algebras. In the Lie theoretic context, this research has been extensively developed in recent years, becoming a topic of independent interest. One of the most studied narrowness condition for the algebras is the thinness. This condition is satisfied in particular by the algebra associated to the Nottingham group.