▶ ANTONIO DI NOLA, GIACOMO LENZI, AND GAETANO VITALE, *Recent results in the spectrum problem.*

Department of mathematics, University of Salerno, Via Giovanni Paolo II 132, 84084 Fisciano (SA), Italy.
E-mail: adinola@unisa.it.
Department of mathematics, University of Salerno, Via Giovanni Paolo II 132, 84084 Fisciano (SA), Italy.
E-mail: gilenzi@unisa.it.
Department of mathematics, University of Salerno, Via Giovanni Paolo II 132, 84084 Fisciano (SA), Fisciano, Italy.
E-mail: gvitale@unisa.it.

MV-algebras are generalized Boolean algebras where the lattice operations $\vee, \wedge$ are replaced by possibly non idempotent sum and product $\oplus, \odot$. MV algebras are the algebraic counterpart of many valued logic, like Boolean algebras are the counterparts of classical logic. The prime spectrum of MV-algebras is a subject of many investigations in the recent years. At the time of writing there is no completely satisfactory duality for MV-algebras analogous to Stone duality for Boolean algebras. The notion is related also with the theories of lattices and lattice ordered abelian groups. For instance, studying the prime spectra of MV-algebras is equivalent to studying the lattices of principal ideals of lattice ordered abelian groups. We survey some of the most interesting findings.

[1] LENZI, GIACOMO; DI NOLA, ANTONIO, *The spectrum problem for Abelian ℓ-groups and MV-algebras*, **Algebra Universalis**, vol. 81 (2020), no. 39, pp.43.

[2] LENZI, GIACOMO; VITALE, GAETANO, *Logical complexity of spectra of Abelian ℓ-groups*, **Journal Of Applied Logics**, vol. 10 (2023), no. 1.