1056-16-1103

Ted Chinburg* (ted@math.upenn.edu), Department of Mathematics, University of Pennsylvania, Philadelphia, PA 19104, Lourdes Juan (lourdes.juan@ttu.edu), Department of Mathematics, Texas Tech University, Box 1042, Lubbock, TX 79409-1042, and Andy Magid (amagid@ou.edu), Department of Mathematics, University of Oklahoma, Norman, OK. Analogies between differential Galois theory and additive Galois structure theory. Preliminary report.

This talk will be about some results in differential Galois theory inspired by results in additive Galois module structure theory. The invariants we study have to do with refined information about the structure of Picard Vessiot rings as comodules for the Hopf algebra of the associated differential Galois group. (Received September 22, 2009)