Lourdes Juan* (lourdes.juan@ttu.edu), Department of Mathematics and Statistics, Texas Tech University, Lubbock, TX 79409. Applications of Algebraic Geometry to Symbolic Integration. Preliminary report.

In this talk we will present, in an expository way, results concerning the application of algebraic-geometric techniques to the symbolic integration of algebraic functions, that need to be more widely known. These results enlarge the class of functions whose integral can be computed in closed form. (Received July 17, 2017)