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Carlos D'Andrea (carlos@dandrea.name), Departament d'Igebra i Geometria, Universitat de Barcelona, Gran Via 585, 08007 Barcelona, Spain, and Matilde N Lalin* (mlalin@math.ias.edu), Institute for Advanced Study, School of Mathematics, 1 Einstein Drive, Princeton, NJ 08540. On the Mahler measure of resultants in small dimension.

We discuss the Mahler measure of resultants whose Newton polytope has low dimension. We show that sparse resultants are tempered, this suggests that their Mahler measure may lead to special values of L-functions and polylogarithms. (Received September 22, 2005)