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Jiayuan Lin* (linj@canton.edu), Department of Mathematics, SUNY Canton, 34 Cornell Drive, Canton, NY 13617, and **Janice Wethington** (janice1729@yahoo.com), 1509 Stevens Creek Drive, North Augusta, SC 29860. *On the Thom-Boardman Symbols for Polynomial Multiplication Maps.*

The Thom-Boardman symbol was first introduced by Thom and later generalized by Boardman to classify singularities of differentiable maps. Although the Thom-Boardman symbol is realized by a sequence of non-increasing, nonnegative integers, to compute those numbers is extremely difficult. There are only sporadic known results in literature. In the case of polynomial multiplication maps, Robert Varley conjectured that computing the Thom-Boardman symbol for polynomial multiplication reduces to computing the successive quotients and remainders for the Euclidean algorithm applied to the degrees of the two polynomials. In this talk, I will explain our proof of Varley's conjecture. This is a joint work with Janice Wethington. (Received December 17, 2010)