Lucio M.G. Prado* (lprado@bmcc.cuny.edu) and Abdramane Serme (aserme@bmcc.cuny.edu), Department of Mathematics - BMCC, The City University of New York, 199 Chambers Street, New York, NY 10007-1097. Discriminating graphs of third degree polynomial functions.

The talk will focus on an algebraic criterion for third degree polynomial functions with real coefficients. It allows to discriminate zeros, graphs, local maximum, local minimum, and inflection point, similarly, to the discriminant of second degree polynomial functions. Also, it can be used as tool to check the accuracy of the shape of a graph plotted by using computer algebra systems. This criterion can be taught in precalculus level course, since it does not require any calculus' technique.

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