1125-37-3150 **Talitha M. Washington*** (`talitha.washington@howard.edu`), Department of Mathematics, Academic Support Building B, Room 221, 2441 Sixth Street, NW, Wastington, DC 20059.
Nonstandard Finite Difference Schemes: the Mathematics of Ronald Mickens. Preliminary report.

In the late 1980's, Ronald Mickens of Clark Atlanta University introduced the concept of a "Nonstandard Finite Difference Scheme (NFDS)" as a methodology which would best approximate solutions to systems of differential equations. In this talk, we give a survey of NFDS's as used in various problems from mathematical physics and mathematical biology. We also discuss the lasting legacy of Ronald Mickens and his impact on the mathematical sciences. (Received September 21, 2016)