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**Michael A. Radin\*** ([michael.radin@rit.edu](mailto:michael.radin@rit.edu)), Rochester Institute of Technology, College of Science, School of Mathematical Sciences, Rochester, NY 14623. *Periodic & Eventually periodic solutions of piecewise and max type difference equations.*

We examine the  $3X+1$  conjecture, the tent map, the max type equations, non-autonomous max type equations and non-autonomous piecewise equations. The patterns of periodic solutions and boundedness of solutions. Furthermore, we study applications as neuron models. (Received January 19, 2015)