Michael Alexander Radin* (michael.radin@rit.edu), Rochester Institute of Technology, College of Science, School of Mathematical Sciences, Rochester, NY 14623. Rulkov & Izhikevich Neural Networking Models; Master neurons and slave neurons with applications in modeling Alzheimer’s Disease. Delays in the signal and eventually periodic solutions.

The objective of the presentation is to compare the similarities and differences between the Rulkov and the Izhikevich Neural Networking Models. Furthermore, we will compare the similarities and differences in the periodic cycles, the delays of the periodic cycles, the stability of the periodic cycles and the spike patterns of the periodic cycles too. (Received September 07, 2017)