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**Peter D. Miller\*** (millerpd@umich.edu). *Semiclassical Aspects of the Three-Wave Resonant Interaction.*

I will describe joint work with Robert Buckingham and Robert Jenkins to analyze the initial-value problem for the three-wave resonant interaction equations, an integrable system governing three quadratically coupled fields, in an appropriate semiclassical limit. As the system is non-dispersive, long time limits do not reveal any particular simplification of the dynamics, but the semiclassical limit allows for the practical calculation of the interaction process. I will describe the construction of an appropriate semiclassical soliton ensemble and show how such ensembles can be used to understand the behavior of resonant triads in a wide variety of systems. (Received January 17, 2017)