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Shigui Ruan* (ruan@math.miami.edu), Department of Mathematics, University of Miami, Coral Gables, FL 33124-4250. *Traveling Waves in Epidemic Models*.

In this talk, we first review some classical epidemic models, such as Ross-Macdonald model, Kermack-McKendrick model, Kendall model, Diekmann-Thieme model, etc. Then the existence of traveling waves in some epidemic models described by reaction-diffusion systems will be demonstrated. Some specific problems, such as the transmission of rabies, will be modeled and studied. (Received August 14, 2013)