## 1011-35-64 **Zhonghai Ding\*** (dingz@unlv.nevada.edu), Las Vegas, NV 89154. *Elliptic sine-Gordon* equation.

In this talk, we discuss the nonlinear elliptic sine-Gordon equation. Some recent results on the existence, multiplicity, and qualitative properties of positive solutions will be presented. (Received August 10, 2005)