

1138-93-370 **Pengcheng Xiao*** (px3@evansville.edu), 1800 Lincoln Ave, Evansville, IN 47722, and **Zeyu Zhang** (zz5@evansville.edu). *Qualitative Analysis of a smoking model.*

The smoking behaviors have been considered as a critical problem on both health and social aspects for a long time. We propose and analyze mathematical model to explore the dynamics of smoking behavior with health educational campaigns involved. Stability analysis and numerical simulation are both discussed in this work. (Received February 13, 2018)