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Antonio Mastroberardino* (axm62@psu.edu), **Ahmed Abdelrazec**, **Folashade Augusto** and **Lea Lanz**. *Two-sex model of the HIV/AIDS Epidemic in Cuba.*

Mathematical models of infectious diseases can help assess the effectiveness of prevention strategies such as random screening and contact tracing. In this talk, we present a mathematical model for the transmission dynamics of HIV/Aids in Cuba in which both prevention strategies play a role in reducing the incidence of HIV. The population is subdivided into male and female compartments to reflect the different gender dynamics. We present a qualitative analysis of the equilibria of the governing nonlinear system and discuss directions for future work. (Received September 16, 2014)