

1163-92-468

**Najat Ziyadi\***, 1700 East Cold Spring Lane, Baltimore, MD 21251. *A mathematical model of human papillomavirus (HPV) and cervical cancer.*

In this talk, we will introduce a mathematical model of human papillomavirus (HPV) and cervical cancer using a system of ordinary differential equations. We will use the next generation method to compute the basic reproduction number. Sensitivity analysis will be used to illustrate the impact of model parameters on the basic reproduction number. (Received September 07, 2020)