

International Conference on APPLIED PHYSICS AND MATHEMATICS

World Congress on MATERIALS RESEARCH AND TECHNOLOGY

October 22-23, 2018
Tokyo, Japan

The sequential transmission model of two strains influenza virus A with antigenic drift mechanism

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Flu is one of the respiratory diseases caused by influenza virus A. Antigenic drift mechanism changed the virus's structure in phase and created two strains of influenza virus A which is simultaneously infected humans. Mathematical modeling can be applied to explain epidemiology of two strains of influenza virus A infection. Here we discuss the sequential transmission

model of two strains influenza virus A with antigenic drift mechanism. There are six equilibrium points obtainable from the model and we analyze the stability of each equilibrium points. The explanation of the model equipped with simulation which described each equilibrium points in face portrait.

Biography

Dianita Putri Army is magister student at Institut Teknologi Bandung and had her bachelor degree at Universitas Gadjah Mada. Her research interest is applied mathematics especially in nonlinear dynamics of mathematical biology. She presented a paper at the 7th SEAMS-UGM International Conference in 2015 as a paper presenter. Furthermore, in magister, she learn about control systems that can be applied in mathematical biology problems.

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