



UPM
UNIVERSITI PUTRA MALAYSIA
BERILMU BERBAKTI

INSPEM WEEKLY SEMINAR

6/2019

Date & Time

8th February 2019, Friday @ 3.15 pm

Venue

Al-Farabi Seminar Room, Second Floor,
INSPEM

Presenter

Dr. Nur Aisyah bt Abdul Fataf

Lecturer

Universiti Pertahanan Nasional Malaysia (UPNM)



Topic

**Dynamical Properties and Synchronization between Two
Chaotic Blood Flow Models**

Abstract

Human heart is a complex system. It has many interacting sub units to make the whole unit complex. It has also been noticed that the dynamics in blood flow changes from laminar to turbulent flows and that can be the origin of chaos. In this paper we discuss a coronary artery (CA) model which has a rich chaotic dynamics. We discuss the dynamical properties using bifurcation and lyapunov exponents. We design a synchronization scheme to synchronize the dynamics of flow in the CA model. The results are effective in terms of biomathematical applications.