



**UPM**  
UNIVERSITI PUTRA MALAYSIA  
BERILMU BERBAKTI

# INSPEM WEEKLY SEMINAR

9/2019

## Date & Time

1<sup>st</sup> March 2019, Friday @ 3.15 pm

## Venue

**Al-Farabi Seminar Room, Second Floor,  
INSPEM**

## Presenter

**Dr. Mai Zurwatul Ahlam Mohd Jaffar**

Associate Researcher  
Laboratory of Computational Statistics and  
Operations Research



## Topic

**Determination of Largest Spitzenkörper inscribed in a Hypha**

## Abstract

Spitzenkörper inscribed in a fungal hypha plays a critical role in hyphal fungal growth visually appeared as distribution center for gathering vesicles and transporting them to the cell surface. Here, outline of Spitzenkörper is described in terms of either circle or ellipse. Subsequently, our focus is determination of center and radius of either largest circle or largest ellipse corresponding to contacts on the walls of the hyphal apex coalesced into the hyphal apex. This study provides a reasonable basic tool for analyzing microscopic image based data that is crucially connected to exocytosis process in hyphal fungal growth.

Keywords: Spitzenkörper, Inscribed, Hyphal apex, Microscopic image.