



**UPM**  
UNIVERSITI PUTRA MALAYSIA  
BERILMU BERBAKTI

# INSPEM WEEKLY SEMINAR

27/2018

## Date & Time

10 August 2018 (Friday) @ 3.15 pm

## Venue

Al-Farabi Seminar Room,  
Second Floor, INSPEM

## Presenter

Prof. Dr. Isamiddin Rakhimov

Research Fellow  
Laboratory of Cryptography, Analysis  
and Structure, INSPEM



## Topic

**An approach to the classification problem of finite-dimensional algebras and its applications**

## Abstract

The talk concerns the classification problem of finite-dimensional algebras over any algebraically closed fields. We focus on an approach proposed by U. Bekbaev. Main idea of the method is to transfer the problem to more simple and constructive method of calculus on matrices of structure constants. We show how to specify classes of algebras in fixed dimension, find their automorphism groups and the derivation algebras. Finally, we give the description of all subalgebras and idempotent elements of two-dimensional algebras over an algebraic closed field.