## Public Lecture, ISM-Isfahan

# Rebecca J. Stones 

Nankai University, Tianjin, China

## Title:

## Totally symmetric and trivially autotopic partial Latin squares

## Abstract:

A partial Latin square is a square matrix which might have empty cells and without repeated symbols in each row or column. If the partial Latin square is stabilized under some permutations of the rows, columns, and symbols, we call that an autotopism. Further symmetries can be formed by permuting the coordinates of (row, column, symbol) triples, and the six resulting squares are its conjugates [e.g. swapping "row" with "column" is the matrix transposel. I'll talk about in-progress work on constructing Latin squares of various weights (number of filled cells) with no nontrivial autotopisms, but all six conjugates are equal.
This is joint work with Raúl Falcón.

# May 11, 2017 (21 Ordibehsht 1396) at 11:00-12:00. 

IPM-Isfahan, Isfahan, Iran

