### THE UNIVERSITY



### OF HONG KONG

# Institute of Mathematical Research Department of Mathematics

## **GEOMETRY SEMINAR**

# On CMV matrices: from orthogonal polynomials to Poisson geometry

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#### **Abstract**

The CMV matrices are the unitary analogs of Jacobi matrices. They were introduced into the orthogonal polynomials community in 2001. Since then, connections with other areas of mathematics were made. In this talk, I will first discuss the relation between CMV matrices and orthogonal polynomials on the circle. Then I will explain the Poisson geometric meaning of such objects and how they are related to the Poisson groups of Drinfeld. Finally I will briefly report on some of the ongoing works in this area.

Date: January 5, 2010 (Tuesday)

Time: 3:00 - 4:00pm

Place: Room 210, Run Run Shaw Bldg., HKU

All are welcome