**University of Macau**

**Faculty of Science and Technology**

**Department of Mathematics**

**FST-SEM/00062/2015**

# Asymptotic properties of the two-sided quaternion linear canonical transform and the positive definitely quaternion sequence

*By*

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**Date:** 21 August 2015 (Friday)

**Time:** 10:30 a.m. – 11:30 a.m.

**Venue:** E11- 1006

## ***Abstract***

In this talk, we first introduce the properties of the two-sided quaternion linear canonical transform, such as time shift characteristics, differential characteristics. Next, we introduce the Riemann-Lebesgue lemma for the (two-sided) QCLT. Then we introduce the two-sided QLCT of a probability measure, and establish its several basic properties. Finally, we give the definitions of the positive definitely quaternion sequence and the positive definitely quaternion function, we extend the classical Herglotz's theorem and Bochner-Minlos theorem to the QLCT setting.

## ***Biography***

Ming Sheng Liu is a full professor of Mathematics and a supervisor of Ph. D student. He received the M.Sc. and Ph.D. degrees, both in Mathematics, from Zhongshan University, Guangzhou, China, in 1989 and 1994, respectively. He has worked in South China Normal University since 1995 (from 1995 to 1997 as Lecturer; from 1998 to 2002 as Associate Professor; as Professor since 2003).

His research interests include complex analysis in one and higher dimensions, and their applications. He has published over 70 journal papers. He has ever gotten third prize of science and technology of guangdong province. He also got the “Excellent Teachers” award in South China Normal University in 2008, and the first Prize of excellent teaching material and the teaching excellence award in South China Normal University in 2014, respectively.

# All are Welcome!

**FST Seminar - MAT - " Asymptotic properties of the two-sided quaternion linear canonical transform and the positive definitely quaternion sequence " at 10:30pm on 21 August 2015 (Friday), E11-1006**