## Summer Seminar on Non-commutative Analysis

#### Wuhan University, Wuhan, China

#### 14 JUL to 12 AUG, 2015

• Lecture Room on the third Floor of the School of mathematics and statistics, Wuhan university

#### **SCHEDULE**

# 14 July Arrival Day

## 15 July First lecture:

15:00 - 18:30 Quanhua Xu: Principles of ergodic theorems

# 16 July Invited talk:

16:30 - 17:30 Deping Ye (Memorial University, Canada): Is it easy to catch Einstein's "spooky action"?

# 17 July Invited talk:

15:00 - 18:30 Benben Liao (ENS Lyon, France): Noncommutative  $L_p$ -spaces without bounded approximation property

# 18 July Lectures:

15:00 - 16:45 Simeng Wang: Ergodic theorems for actions by amenable groups

16:45 - 18:30 Mu Sun: Calderón's transference principle

## 19 July Free Day

#### 20 July Lecture:

15:00 - 18:30 Cheng Yan: Maximal inequalities on Euclidean spaces I

## 21 July Talk:

15:00 - 18:30 Xiao Xiong: Characterizations of operator-valued Hardy spaces

### 22 July Problem Sessions

### 23 July Lecture:

15:00 - 18:30 Cheng Yan: Maximal inequalities on Euclidean spaces II

### 24 July Talk:

15:00 - 18:30 Runlian Xia: Operator-valued local Hardy spaces

#### 25 July Lecture:

15:00 - 18:30 Benben Liao: Maximal inequalities for actions of amenable groups

#### 26 July Talk:

15:00 - 18:30 Xingxing Yao: Complex symmetry of weighted composition operators in several complex variables

#### 27 July Lecture:

15:00 - 18:30 Xiao Xiong: Ergodic theorems for isometries and free group actions

#### 28 July Harmonic day:

15:30 - 16:30 C. D. Sogge (Johns Hopkins University, USA): Focal points and sup-norms of eigenfunctions

16:30 - 16:45 Coffee break

16:45- 17:45 Jie Xiao (Memorial University, Canada): Capacitance imbedded between flux and mass

## 29 July Free Day

#### 30 July Talk:

16:00 - 18:00 Simeng Wang:  $L_p$ -improving convolution operators on finite quantum groups

#### 31 July Lectures:

15:00 - 16:30 Xiao Xiong: Mean ergodic theorem for free group actions on  $L_2$ 

17:00 - 18:30 Benben Liao: Maximal inequalities for free group actions on  $L_2$ 

### 1 August Talk:

15:00 - 18:30 Mu Sun: Noncommutative multi-parameter weighted ergodic theorem

## 2 August Invited talks:

15:00 - 16:00 Cheng Yan (Xinjiang University): Toeplitz and Hankel operators on noncommutative Hardy spaces

16:00 - 16:30 Coffee break

16:30 - 17:30 Ruhan Zhao (Suny Brockport, New York, USA): Weak factorization and Hankel forms for weighted Bergman spaces on the unit ball

### 3 August Lecture:

15:00 - 18:30 Runlian Xia: Maximal inequalities for free group actions on  $L_1$ 

#### 4 August Talk:

15:00 - 18:00 Simeng Wang: Lacunary Fourier series for compact quantum groups

#### 5 August Invited talks:

15:30 - 16:30 M. Mastyło (Adam Mickiewicz University, Poland): The almost everywhere convergence of Fourier series

16:30 - 16:45 Coffee break

16:45 - 17:45 F. Sukochev (University of NSW, Australia): On the Arazy conjecture concerning Schur multipliers on Schatten ideals

#### 6 August Lecture:

15:00 - 18:30 Zeqian Chen: Yeadon's maximal ergodic inequalities

7 August Lecture:

15:00 - 18:30 Zeqian Chen: Junge-Xu's noncommutative maximal ergodic inequalities

8 August Talk:

16:00 - 18:00 Maofa Wang: Linear combination composition operators on Bergman spaces

9 August Talk:

**15:00 - 16:00** Tao Ma: Vector valued *q*-variational inequalities

10 August Lecture:

15:00 - 18:30 Xiao Xiong: Nevo-Stein's complex interpolation for maximal inequalities of free group

actions I

11 August Lecture:

 $\textbf{15:00 - 18:30} \qquad \textbf{Runlian Xia:} \ \ \text{Nevo-Stein's complex interpolation for maximal inequalities of free group}$ 

actions II