

**ESI Programme on “K-Theory and Quantum Fields”****May 21 - July 27, 2012****Instructional Workshop****Tuesday, May 29 - June 1****Organized by: Matt Ando, Alan Carey, Harald Grosse, Jouko Mickelsson****Monday, May 28: bank holiday, ESI administration is closed****• Tuesday, May 29****09:30 – 10:30:** Urs Schreiber*Twisted differential structures in string theory I***10:30 – 11:00:** coffee break**11:00 – 12:00:** Frederic Rochon*K-duality on stratified spaces I***12:00 – 14:00:** lunch break**14:00 – 15:00:** Daniel Stevenson*An introduction to twisted K-theory and higher structures I***15:00 – 16:00:** break**16:00 – 17:00:** tutorial**• Wednesday, May 30****09:30 – 10:30:** Urs Schreiber*Twisted differential structures in string theory II***10:30 – 11:00:** coffee break**11:00 – 12:00:** Daniel Stevenson*An introduction to twisted K-theory and higher structures II***12:00 – 14:00:** lunch break**14:00 – 15:00:** John Francis*Factorisation algebras and homology I*

- **Thursday, May 31**

**09:30 – 10:30:** John Francis

*Factorisation algebras and homology II*

**10:30 – 11:00:** coffee break

**11:00 – 12:00:** Urs Schreiber

*Twisted differential structures in string theory III*

**12:00 – 14:00:** lunch break

**14:00 – 15:00:** Frederic Rochon

*K-duality on stratified spaces II*

**16:00 – 17:00:** Matthias Lesch

*A gluing formula for the analytic torsion on singular spaces*

- **Friday, June 1**

**09:30 – 10:30:** Urs Schreiber

*Twisted differential structures in string theory IV*

**10:30 – 11:00:** coffee break

**11:00 – 12:00:** Alan Carey

*~Analytic K-homology*

**16:00 - 17:00:** Matthias Lesch

*Regular operators in Hilbert  $C^*$ -modules*

**All lectures take place in the ESI Boltzmann Lecture Hall**