Generalized Geometry

Events for:
Monday, May 9th - Friday, May 13th

Monday, May 9th

9:00am **Registration and Welcome - SCGP 102**

9:40am **Robert Leigh - SCGP 102**

Title: Metastrings, Non-locality and Quantum Space-time

10:20am **Coffee - SCGP Cafe**

10:50am **Dimitrios Tsimpis - SCGP 102**

Title: Generalized complex geometry of pure backgrounds

11:30am **Mathai Varghese - SCGP 102**

Title: New directions in T-duality

12:10pm **Lunch - SCGP Cafe**

2:10pm **Olaf Hohm - SCGP 102**

Title: Exceptional Field Theory and the Consistency of Kaluza-Klein

2:50pm **Ulf Lindstrom - SCGP 102**

Title: Sigma models and Generalized Kähler Geometry

3:30pm **Tea Time - SCGP Lobby**

4:00pm **David Berman - SCGP 102**

Title: F-theory from Exceptional Field Theory

Tuesday, May 10th

9:00am **Jeong-Hyuck Park - SCGP 102**

Title: Semi-covariant geometry & Double Field Theory

9:40am **Simeon Hellerman - SCGP 102**

Title: Comments on Nongeometry and Conformal Field Theory

10:20am **Coffee - SCGP Cafe**

10:50am **Dieter Luest - SCGP 102**

Title: F-theory, T-fects and 6 d superconformal field theories

11:30am **Lunch - SCGP Cafe**

1:00pm **SCGP Weekly Talk: Daniel Waldram "Generalised geometry and supersymmetric spacetimes" - SCGP 102**

Title: Generalised geometry and supersymmetric spacetimes

Abstract: String theory, as a theory of extended rather than pointlike objects, endows spacetime with remarkable and unexpected symmetries, which in turn often suggest new structures and relations in geometry. We start by introducing some simple aspects of one such symmetry - T-duality, the subject of this week's workshop. We then turn to the problem of characterising generic supersymmetric spactimes, which are the natural string generalisations of special holonomy manifolds. We explain how they correspond to torsion-free structures in an extension of Hitchin and Gualtieri's "generalised geometry", a construction motivated by T-duality.

2:10pm **Gor Sargsyan - SCGP 102**

Title: Topological defects and dualities in String theory

Abstract: We review the topological defects and their role in the description of the dualities in String theory. We consider various T-dualities (abelian, non-abelian, fermionic) and show that they are generated by the topological defects given by the Poincare bundle and its non-abelian and fermionic cousins. The Fourier-Mukai transforms of the Ramond-Ramond fields generated by the corresponding fluxes are analyzed in detail.

2:50pm **Arkady Tseytlin - SCGP 102**

Title: Deformed AdS x S string models and generalized type II equations

3:30pm **Tea Time - SCGP Lobby**

4:00pm **Henning Samtleben - SCGP 102**

Title: Supersymmetry in E8 exceptional field theory

5:00pm **Wine and Cheese Reception - SCGP Cafe**

Wednesday, May 11th

9:00am **Marios Petropoulos - SCGP 102**

Title: Holography, duality and integrability

9:40am **Kentaroh Yoshida - SCGP 102**

Title: Recent progress towards the gravity/CYBE correspondence

10:20am **Coffee - SCGP Cafe**

10:50am **Warren Siegel - SCGP 102**

Title: Generalizations of string theory

11:30am **Discussion Time - SCGP 102**

12:10pm **Lunch - SCGP Cafe**

2:10pm **Mario Garcia-Fernandez - SCGP 102**

Title: Killing spinors in generalized geometry

2:50pm **Ruben Minasian - SCGP 102**

Title: String corrections and generalised geometry

3:30pm **Tea Time - SCGP Lobby**

4:00pm **Michela Petrini - SCGP 102**

Title: Marginal deformations of N=1 SCFT's and generalised geometry"

Thursday, May 12th

9:00am **Machiko Hatsuda - SCGP 102**

Title: Type II superspace with manifest T-duality and superstring action

9:40am **Jeff Streets - SCGP 102**

Title: T-duality and renormalization group flows

10:20am **Coffee - SCGP Cafe**

10:50am **Gong Show - SCGP 102**

12:15pm **Lunch - SCGP Cafe**

1:50pm **Gong Show**

2:50pm **Christopher Hull**

3:30pm **Tea Time - SCGP Lobby**

4:00pm **Barton Zwiebach - SCGP 102**

Title: Aspects of higher-derivative duality-invariant actions.

Friday, May 13th

9:00am **Konstantinos Sfetsos - SCGP 102**

Title: Aspects of non-Abelian T-duality

9:40am **Alexandre Sevrin - SCGP 102**

Title: Some comments on supersymmetry and the doubled formalism from a worldsheet perspective

10:20am **Coffee - SCGP Cafe**

10:50am **Rikard von Unge - SCGP 102**

Title: Superspace dualities in two dimensions

11:30am **Alessandro Tomasiello - SCGP 102**

Title: Six-dimensional conformal field theories and T-branes

Abstract: I will discuss a class of CFTs obtained by Higgsing the (2,0) ADE theory by a pair of nilpotent elements in the ADE group. In the A_k and D_k case, the nilpotent elements are labeled by Young diagrams, and the holographic dual is known explicitly in IIA. T-dualizing to F-theory is necessary to understand the D_k case. In the E_k case, only the F-theory description is available, via the theory of so-called Bala-Carter labels.

12:10pm **Lunch - SCGP Cafe**

1:50pm **Mariana Graña - SCGP 102**

Title: Enhanced gauge symmetry and winding modes in Double Field Theory

3:30pm **Tea Time - SCGP Lobby**