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