

Provisional Programme for the Durham Symposium on
Spinors, Twistors and Complex Structures in General Relativity
5-15 July 1988

- Tuesday, 5 July arrival and registration
Cold evening meal available at Grey College until
8.30 pm.
- Wednesday, 6 July
- 9.30 a.m. R. Penrose
New Directions in Twistor Theory
- 10.45 a.m. coffee in Mathematics Department
- 11.15 a.m. M.A. Singer
Twistor Conformal Field Theories
- 1.00 p.m. lunch at Grey College
- 2.30 p.m. A. Ashtekar
New Variable Framework for Einstein and Yang-Mills
Theories
- 3.45 p.m. tea in Mathematics Department
- 4.15 p.m. L.J. Mason
Hypersurface Twistors
- 6.30 p.m. sherry at Grey College
- 7.00 p.m. dinner at Grey College
- Thursday, 7 July
- 9.30 a.m. M.G. Eastwood
Conformal Geometry and Related Structures
- 10.45 a.m. coffee
- 11.15 a.m. T.N. Bailey
Local Twistors and Conformal Geometry
- 1.00 p.m. lunch
- 2.30 p.m. E.T. Newman
Backlund Transformations for Self-Dual Yang-Mills
Equations
- 3.45 p.m. tea
- 4.15 p.m. R.S. Ward
2 + 1 Dimensional Twistor Theory
- 7.00 p.m. dinner

Friday, 8 July

- 9.30 a.m. R. Graham
Einstein Metrics with Prescribed Conformal Infinity.
- 10.45 a.m. coffee
- 11.15 a.m. R.J. Baston
Twistors and Representation Theory
- 1.00 p.m. lunch
- 2.30 p.m. C.R. LeBrun
Ambitwistors and Einstein's Equations
- 3.45 p.m. tea
- 4.15 p.m. E. Sokatchev
Harmonic Superspace

Saturday, 9 July

- 9.30 a.m. E. Dunne
Generalized Twistor Transform
- 10.45 a.m. coffee
- 11.15 a.m. N.M.J. Woodhouse
Stationary Axi-Symmetric Spacetimes
- 1.00 p.m.
- 2.30 p.m. S.W. Hawking
Baby Universes
- 3.45 p.m. tea
- 4.15 p.m. D.N. Page
The Hartle-Hawking Proposal and the Arrow of Time
- 7.00 p.m. dinner

Sunday, 10 July Excursion to York

The programme for Week 2 (11-15 July) will be decided at the Symposium.

In addition, it is expected that there will be some more specialist talks in the evenings, to be arranged at the Symposium.

There will be a special dinner which will be on Tuesday, 12 July, at 7.00 p.m. There will also be a tour of Durham Cathedral, on Tuesday, 12 July, at 3.30 p.m.

Further Programme for the Durham Symposium on Spinors, Twistors and Complex Structures in General Relativity

SECOND WEEK

Monday, 11 July

- 9.30 a.m. A.P.Hodges
Twistor Diagrams
- 10.45 a.m. Coffee
- 11.15 a.m. A.Trautman
The Spinorial Chessboard
- 1.00 p.m. Lunch
- 2.00 p.m. Photograph - Grey College
- 2.30 p.m. C.Hull
Topological Quantum Field Theories
- 3.45 p.m. Tea
- 4.15 p.m. A.Rogers
Path Integration in Superspace
- 7.00 p.m. Dinner
- 8.30 p.m. S.A.Huggett
Projective Twistor Diagrams and the Dot Product

Tuesday, 12 July

- 9.30 a.m. M.F.Atiyah
Title to be announced
- 10.45 a.m. Coffee
- 11.15 a.m. S.G.Gindikin
Integral Geometry, Twistors and Generalized Conformal Structures
- 1.00 p.m. Lunch
- 2.00 p.m. L.Hughston [Note earlier time]
Real Classical Strings in 4-Dimensions
- 3.45 p.m. Visit to Durham Cathedral
- 7.00 p.m. Sherry Reception
- 7.30 p.m. Special Dinner

Wednesday, 13 July

- 9.30 a.m. K.P.Todd
The Present Status of Quasi-Local Mass T
- 10.45 a.m. Coffee
- 11.15 a.m. Z.Perjés
Parametric Spinors and Applications to Classical and Quantum Gravity
- 1.00 p.m. Lunch
- 2.30 p.m. C.Pope
~~Manifolds with Nowhere-Vanishing Spinor Fields~~
Locally anomalous & critical dimensions for supermembranes
- 3.45 p.m. Tea
- 4.15 p.m. K.Stelle
Massless States in Supermembranes
- 7.00 p.m. Dinner
- 8.30 p.m. J.Isenberg
Ricci Flow and the Smoothing Cosmological Spacetimes

Thursday, 14 July

- 9.30 a.m. H.Friedrich
Static and Radiative Space-times
- 10.45 a.m. Coffee
- 11.15 a.m. R.Sorkin
Analytic Continuation and Topology Change in 2-Dimensions
- 1.00 p.m. Lunch
- 2.30 p.m. P.Yasskin
Ambitwistors, Bitwistors and Gravity
- 3.45 p.m. Tea
- 4.15 p.m. G.A.J.Sparling
Twistors and Integrable Systems
- 6.30 p.m. Dinner [Note earlier time]
- 8.30 p.m.

Friday, 15 July

Check out by 10.00 a.m. evening if staying for lunch.

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EVENING LECTURES 7, 8 JULY

THURSDAY, 7 July: Room CM221 Mathematical Sciences Department

8.30 p.m. M.Batchelor - The Manifold of Maps between Manifolds

9.00 p.m. C.T.J.Dodson - Universal Connections and Stability

FRIDAY, 8 July: (Room to be arranged: either CM221 or CM101)

8.30 p.m. R.O.Wells,Jr. - Geometry of Supermanifolds.