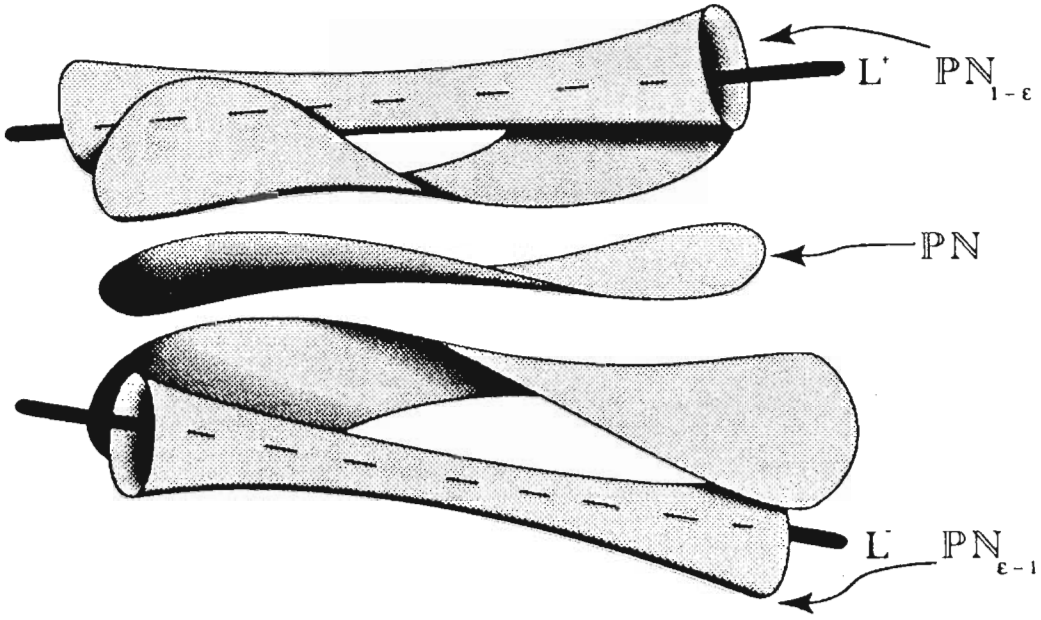
TWISTOR THEORY



There will be a conference on Twistor Theory from the 23rd to the 25th August 1993, in Devon.

The principal speakers are:

T N Bailey (Edinburgh)
M G Eastwood (Adelaide)
C LeBrun (SUNY)
S A Merkulov (Odense)
H Pedersen (Odense)
R Penrose (Oxford)
K P Tod (Oxford)
N M J Woodhouse (Oxford)

All are very welcome. There will be a registration fee of the order of £25, and full board for the conference will cost about £90.

For further details, please contact:

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The organisers are grateful to the London Mathematical Society for financial support for this conference.

This is the second announcement of the

TWISTOR THEORY CONFERENCE

23rd - 25th August 1993, in Devon.

Programme:

22nd August	Arrive in time for dinner at 8.00.
23rd August	Roger Penrose "Twistors and the Einstein equations"
	Claude LeBrun "Self-dual metrics on compact 4-manifolds"
	Henrik Pedersen "Self-duality and the connected sums of complex projective planes
	Conference Dinner.
24th August	Mike Eastwood "Twistors in Representation Theory"
	Nick Woodhouse "Twistor theory and isomonodromy"
	Toby Bailey "Conformal Invariants"
25th August	Paul Tod "Self-dual Bianchi type 9 metrics"
	Sergey Merkulov "Relative deformation theory and differential geometry"
	Conference ends after lunch.

Travel information:

The conference is being held at our Faculty of Agriculture, Food, and Land Use at Seale-Hayne, near Newton Abbot, in the South Hams of Devon.

By road, you take the M5 to Exeter and then the A38 and A382 to Newton Abbot, on the outskirts of which you turn right to Ashburton on the A383. Seale-Hayne is then three miles along this road on the right.

By rail, you take the Intercity train to Plymouth or Penzance from London or Edinburgh, alighting at Newton Abbot station. The journey from London (Paddington) takes about three hours, and there are trains arriving at Newton Abbot at 17.20 and 18.19 on Sundays. You would be well advised to book a seat. Trains from Oxford and the "Railair Coach" from Heathrow take you to Reading, where you can join the Penzance or Plymouth train.

By air, you can fly Brymon European from Heathrow to Plymouth (19.45-21.25 on Sunday) and return that way on Wednesday (14.05-15.40 or 17.30-19.10).

Accommodation:

This will be in student single rooms in the main quadrangle. There is a very small number of twin or double rooms.

Conference Dinner:

This will be at Buckland-Tout-Saints, Kingsbridge. The menu will cost £20.

Friends:

Please do not hesitate to bring family or friends to Seale-Hayne if you wish. No special events have been arranged for them, but in fine weather Devon is very beautiful, and in particular Dartmoor is only a few miles away from the conference, so bring walking gear.

Library:

A small collection of our favourite monographs and texts will be available for reference in the Faculty library.

Communications:

The Faculty's fax number is 0626 325605 and its Reception's telephone number is 0626 325800.

Also, it will be possible to use e-mail while at the conference.

Cost:

The registration fee is £25, and full board from Sunday afternoon until Wednesday afternoon is £91.50, all payable to the University of Plymouth. If you are coming to the conference dinner, please deduct £8 from this figure.

The organisers are grateful to the London Mathematical Society for financial support for this conference.

Registration:

The deadline for registration is the 9th of August. Please simply fax, telephone, e-mail, or write to me, saying when and how you will arrive, whether you are coming to the conference dinner, and which menu you would like.

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Kähler-Einstein metrics with SU(2) action.

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Abstract

The aim of this paper is to analyse Kähler-Einstein metrics of real dimension four admitting an isometric action of $SU(2)$ with generically three-dimensional orbits. In the case when the Einstein constant is zero the metrics are hyperkähler and have been classified. We shall take the Einstein constant to be nonzero.

We derive a system of ordinary differential equations whose solutions correspond precisely to such metrics, and we determine which trajectories of the equations give complete metrics. There are two families of complete metrics with negative Einstein constant. One consists of the $U(2)$-invariant metrics previously found by other authors. The other family consists of triaxial metrics.