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.

Stephen Huggett
Twistor Conference
School of Mathematics and Statistics
University of Plymouth
Plymouth PL4 8AA
Devon, UK

Telephone: 0752 232720
Fax: 0752 232780
E-mail: p07406@uk.ac.plymouth or p08181@uk.ac.plymouth

Kähler-Einstein metrics with SU(2) action.

Andrew S. Dancer¹,², Ian A. B. Strachan³

¹ Peterhouse, Cambridge, CB2 1RD
² DAMTP, Silver Street, Cambridge, CB3 9EW
³ Mathematical Institute, 24-29 St. Giles', Oxford OX1 3LB.

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.
References

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Hierarchy of Conservation Laws for Self-Dual Gravity

Ian A. B. Strachan

Mathematical Institute, 24-29 St. Giles', Oxford OX1 3LB.

Abstract

An infinite hierarchy of non-local conservation laws is constructed for the self-dual vacuum equations. Further, it is shown that the construction of such conserved currents has a natural description in terms of Penrose’s non-linear graviton construction of such self-dual vacuum metrics.

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