

# Lecture Notes in Physics

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## Geometric Aspects of the Einstein Equations and Integrable Systems

Proceedings of the Sixth Scheveningen Conference,  
Scheveningen, The Netherlands, August 26–31, 1984

Edited by R. Martini



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## P R E F A C E

The present volume contains the notes of lectures delivered at the Sixth Scheveningen Conference, August 26-31, 1984.

The conference was again organized by B.L.J. Braaksma (University of Groningen), E.M. de Jager (University of Amsterdam), H. Lemei (Delft University of Technology), R. Martini (Twente University of Technology) and was financially supported by the Koninklijke Nederlandse Akademie van Wetenschappen.

This conference is a continuation of a series of meetings started in 1973. All of these meetings were centered around one or more topics of main interest and were partly of instructional nature with the hope to stimulate further research.

As the two preceding conferences, this meeting was in the area of geometric methods in mathematical physics.

This time the emphasis was on mathematical aspects of the Einstein equations of general relativity and mathematical soliton theory.

The contributions of N. Sanchez, B.C. Xanthopoulos, G.G.A. Bäuerle, T. Dray are in the former area and those of A. Sym, P.F. Dhooghe and F.W. Nijhoff, H.W. Capel, G.L. Wiersma are in the latter field.

The articles of E.D. Fackerell and E.W.C. van Groesen deal with related topics.

Unfortunately A. Trautman was not able to prepare his contribution in time. He will publish a part of his lectures later, with due reference to this conference and proceedings.

The organizing committee is indebted to all who made this conference possible and in particular the Koninklijke Nederlandse Akademie van Wetenschappen for their financial support.

We like to express our gratitude to all who helped to make this conference a success, participants for creating a nice and friendly atmosphere, invited speakers for accepting our invitation and contributors for their very interesting and stimulating accounts.

Thanks are due to Mrs. Lidy Krukerink for her assistance during the preparation of the final typescript. Finally, we wish to express our gratitude to Springer-Verlag for their assistance and effective production of these proceedings.

R. Martini

Enschede, The Netherlands, June, 1985

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