

Preface

The Second Samos Meeting on Cosmology, Geometry and Relativity organised by the Research Laboratory for Geometry, Dynamical Systems and Cosmology (GEO.DY.SY.C.) of the Department of Mathematics, the University of the Aegean, took place at the Doryssa Bay Hotel/Village at Pythagoreon, site of the ancient capital, on the island of Samos from August 31st to September 4th, 1998. The Meeting focused on mathematical and quantum aspects of relativity theory and cosmology. The Scientific Programme Committee consisted of Professors D. Christodoulou and G.W. Gibbons and Dr S. Cotsakis, and the Local Organizing Committee comprised Professors G. Flessas and N. Hadjisavvas and Dr S. Cotsakis. More than 70 participants from 18 countries attended.

The scientific programme included 9 plenary (one hour) talks, 3 ‘semi-plenary’ (30 minute) talks and more than 30 contributed (20 minute) talks. There were no poster sessions. However, a feature of the meeting was an ‘open-issues’ session towards the end whereat participants were given the opportunity to announce and describe open problems in the field that they found interesting and important. The open-issues discussion was chaired by Professor Gibbons and we include a slightly edited version of it in this volume.

This volume contains the contributions of most of the invited talks as well as those of the semi-plenary talks. Unfortunately the manuscripts of the very interesting talks by John Barrow about ‘Varying Constants’, Ted Jacobson on ‘Trans-Planckian Black Hole Models: Lattice and Superfluid’ and Tom Ilmanen’s lecture on ‘The Inverse Mean Curvature Flow of the Einstein Evolution Equations Coupled to the Curvature’ could not be included in this volume.

The meeting was sponsored by the following organizations: the University of the Aegean, the Ministry of Civilization, the Ministry of Education and Religion and the Ministry of the Aegean, the National Research and Technology Secretariat, EPEAEK (EU funded program), the Municipality of Pythagoreon, the Union of Municipalities of Samos, and the Prefecture of Samos. All this support is gratefully acknowledged.

We wish to thank all those individuals who helped to make this meeting possible. In particular we are deeply indebted to Professor P.G.L. Leach (Natal) who contributed a great deal in many aspects before, during and after the event. The heavy duty of being Secretary to the Meeting was carried out with great success by Ms Thea Vigli-Papadaki with help from Mrs Manto Katsiani.

We also wish to express our sincere thanks to the staff of Springer-Verlag for their enormous and expert help in shaping this volume and, more generally, for the true interest they show in the series of these Samos meetings.

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