Heavy Ion Collisions

Cargèse 1984

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Heavy Ion Collisions

Cargèse 1984

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PREFACE

The 1984 Cargèse Advanced Study Institute was devoted to the study of nuclear heavy ion collisions at medium and ultrarelativistic energies. The origin of this meeting goes back to 1982 when the organizers met at the GANIL laboratory in Caen, France which had just started accelerating argon ions at 44 MeV per nucleon. We then realized that 1984 should be the appropriate time to review the first results obtained with such new kinds of facilities. The material contained in this volume, presenting many beautiful results on nuclei at high excitation, fully confirms this point.

Many stimulating exchanges between experts in rather different fields already took place during the school and we hope that this cross fertilization will lead to further developments.

About half of the present volume is also devoted to the field of relativistic heavy ion collisions, which is now expanding rapidly. As an illustration, let us recall that the construction of a 30 on 30 GeV per nucleon collider at Brookhaven has been recognized last year as one of the major priorities by the US Nuclear Science Advisory Committee.

We would like to express our gratitude to NATO for its generous financial support which made this institute possible.

We also wish to thank the Institut de Physique Nucléaire et de Physique des Particules (France), the Commissariat à l'énergie atomique (France) and The National Science Foundation (USA) for the attribution of travel grants.

Special thanks are due to our colleagues Gordon Baym (Urbana), S.E. Koonin (Caltec) and W.J. Swiatecki for valuable suggestions regarding the program of the school.

It is also a pleasure to express our gratitude to the Université de Nice for making available the facilities of the Institut d'Etudes Scientifiques de Cargèse. Last but not least we wish to thank Ms Marie-France Hanseler for her outstanding organizational work, and the Staff of the Cargèse Institute for making our stay in Cargèse a very enjoyable one.

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