FOREWORD

The Bogolyubov Conference on Problems of Theoretical and Mathematical Physics organized by the Russian Academy of Sciences (RAS), the National Academy of Sciences of Ukraine (NASU) and the Joint Institute for Nuclear Research (JINR) was held on September 27 – October 6, 1999 in Moscow (27.09–28.09), Dubna (29.09–2.10) and Kyiv (3.10–6.10).

The Conference was devoted to the commemoration of the 90th anniversary of the birth of the outstanding scientist Nikolai Nikolaevich Bogolyubov (1909–1992).

The programme of the Conference has covered the problems of mathematics, mechanics, theoretical and mathematical physics to which N.N. Bogolyubov made a fundamental contribution. The Bogolyubov meetings in Moscow, Dubna and Kyiv shared the common interdisciplinary spirit of the Bogolyubov Conferences, and brought together many scientists with the interests ranging from mathematics to nonlinear mechanics, quantum field theory, particle physics, statistical physics, kinetics and nuclear physics.

The Conference programme included memory sessions, plenary talks and parallel sessions. Many of the speakers sent their contributions. We thank them for having allowed us to collect such a large amount of papers in a short time.

The number of participants overtook our optimistic expectations and we were forced to refuse to some late applications in order to limit the talks. More than 40 plenary talks were devoted to the most actual problems from mathematics to nuclear physics. About two hundred original investigations of fundamental aspect of physics, mechanics and mathematics were presented at parallel sessions.

We thank all the participants who, attracted by their interest to the Bogolyubov Meeting, came together to make this Conference such a success. We thank the heads of Moscow State University, the V.A. Steklov Mathematical Institute of RAS, the Joint Institute for Nuclear Research, the Bogolyubov Institute of Theoretcal Physics of NASU and the Mathematical Institute of NASU in Kyiv for hosting the Conference and providing the administrative help and secretary staff.

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