

Preface

The International Workshop ‘Kinetic Theory of Nonideal Plasmas’ was held on September 27–29 2004 at the Christian–Albrechts–University in Kiel, Germany. There were about 60 participants from Germany, The Netherlands, Russia, Spain, The Ukraine and the United States.

The focus was on a many-particle nonequilibrium description of charged particle systems, where special attention was devoted to kinetic theory methods. Among the topics presented in this volume, there are plasma kinetic equations, theory of fluctuations, interaction of plasmas with electromagnetic fields, transport and optical properties, and also unusual comparatively novel kinds of charged particle systems, such as dusty or colloidal plasmas.

At the same time, this workshop intended to honour one of the founders of kinetic theory methods in nonideal plasmas—Yuri Lvovich Klimontovich (1924–2002)—whose 80th birthday would have been during the workshop period. Yuri Klimontovich’s remarkable contributions to statistical physics, to kinetic theory and to the theory of fluctuations have had profound influence on the development of plasma theory¹ in many countries. Very many of the contributors to this volume were students or co-workers of Yuri Klimontovich.

Many of the papers in this volume, therefore, give credit to the scientific contributions of Yuri Klimontovich. Moreover, many of the participants of the workshop were friends of Yuri, and some of them contributed personal photographs and brief memories which are included in this volume.

This workshop would not have been possible without the generous financial support by the Deutsche Forschungsgemeinschaft, by the State of Schleswig-Holstein, and by the Christian–Albrechts–University Kiel. Furthermore we are grateful to Doris Schulz and to Fanny Geisler for their assistance during the workshop and Dirk Semkat for assistance in preparing this volume.

Kiel, April 2005
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Wolf Dietrich Kraeft

¹ For a brief overview, see the article by Bonitz M, Ebeling W and Romanovski Yu, 2003 Contrib. Plasma Phys. **43** 247.



Participants of the workshop “Kinetic Theory of Nonideal Plasmas”, Kiel, September 2004. From left: A. Zagorodny, W. Hoyer, S. Uryupin, S. Trigger, H. Löwen, S. Malinowskaya, V. Belyi, M. Romanosky, B. Omar, G. Grubert, W. Ebeling, T. Pohl, U. Felderhof, B. Ebeling, D. Kremp, D. Gericke, H. Fehske, P. Mulser, D. Semkat, K. Matyash, V. Golubnychiy, V. Filinov, T. Bornath, S. Smolyanski, A. Filinov, W.D. Kraeft, D. Ballester, E. Filinova, P.P.M.J. Schram, F. Gaisler, P. Ludwig, M. Bonitz, S. Kosse, I. Schram-Thomer.