Preface

This volume is a collection of three articles on quantum many-body problems. It is mainly an outgrowth of the seminars organized by us in 1996.

The first article is by I. Cherednik. We organized one-week seminar for his lectures at the International Institute for Advanced Studies, when the earth had a visit of the comet Hyakutake. The first five sections of this article are originally written by nine audiences: Etsuro Date, Kenji Iohara, Michio Jimbo, Masaki Kashiwara, Tetsuji Miwa, Masatoshi Noumi and Yoshihisa Saito. Cherednik gave other series of lectures in 1997 at the Research Institute for Mathematical Sciences, Kyoto University. The last three sections are written by himself based on the notes taken by Tatsuya Akasaka and Koichi Takemura.

The second article is by P. J. Forrester. This is written by himself during his stay in RIMS as a visiting professor, May-August, 1996. It is based on his lectures given at Kinosaki.

The last article is by D. Uglov. This is written by himself based on the notes taken by Takemura, of his lectures given in February 1996 at RIMS. It also contains more recent developments by himself.

We thank the authors and the above mentioned collaborators for their efforts. We thank also IIAS for their support extended to us at the meeting for Cherednik’s lectures.

We organized these lectures as a part of the research activities supported by a Grant-in Aid for Scientific Research on Priority Areas 231, the Ministry of Education, Science and Culture, 1993-7. In this occasion, we thank Kenji Ueno, the chief of this grant, and Noriko Tanaka, the secretary, for their supports to our activities throughout the five years.

Masaki Kashiwara and Tetsuji Miwa
Organizers
Kyoto, Japan
January 1998