Preface

This volume is a collection of three articles on quantum many-body problems. It is mainly an outgrowth of the seminars organnized 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 commet 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 thier efforts. We thank also IIAS for their support extended to us at the meeting for Cherednik's lectures.

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Masaki Kashiwara and Tetsuji Miwa Organizers Kyoto, Japan January 1998