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Preface

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This issue contains the Proceedings of the Workshop on the Critical Stability of Few-Body Quantum Systems, held at Erice, Sicily (Italy) from October 10 to 18, 2008.

This was the fifth Workshop on this subject, after Trento (1997), Les Houches (2001), Trento (2003) and Dresden (2005). As for these previous workshops, emphasis was put on the interdisciplinary character, with participants coming from theoretical chemistry, atomic, nuclear and particle physics, and mathematical physics and some of the topics touching few-body correlations in large systems, or applications to astrophysics.

To avoid too spread a variety of subjects, we suggested contributions on the following topics:

- Exotic hadrons,
- Antiproton physics,
- Light nuclei and hypernuclei,
- New methods in nuclear physics,
- Efimov states,
- Resonances, scattering on composite targets,
- Rigorous results, in particular for Coulomb systems,
- Traps,
- Atomic clusters
- Few-body correlations in large systems,
- Applications to Astrophysics.

The Workshop was organised in the framework of the School of Critical Stability, whose Director, André Martin, gave an introducing lecture, presenting the Ettore Majorana Centre of Erice, its history and its ongoing activities.

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We had nearly 50 participants, coming from India, Brazil, United States and for most of them, from nearby or remote European countries.

As for the three previous workshops, (*Few-Body Syst.* 31 (2002) 71–266; 34 (2004) 1–208; 38:55–219, 2006), the proceedings are published as a special issue of *Few-Body Systems*, this ensuring a widespread diffusion. We thank the editors and staff members for their help.

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