

## Preface

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This volume contains most of the contributions presented at the Conference *Mathematical Structures in Quantum Systems and applications*, held at the Centro de Ciencias de Benasque "Pedro Pascual", Benasque (Spain) from 8th to 14th July 2012.

The aim of the Conference was to bring together physicists working on different applications of mathematical methods to quantum systems in order to enable the different communities to become acquainted with other approaches and techniques that could be used in their own fields of expertise.

We concentrated on three main subjects:

- the geometrical description of Quantum Mechanics;
- the Casimir effect and its mathematical implications;
- the Quantum Zeno Effect and Open system dynamics.

Each of these topics had a set of general lectures, aimed at presenting a global view on the subject, and other more technical seminars. We would like to thank all participants for their contribution to creating a wonderful scientific atmosphere during the Conference. We would especially like to thank the speakers and the authors of the papers contained in this volume, the members of the Scientific Committee for their guidance and support and, of course, the referees for their generous work. Special thanks are also due to the staff of the Centro de Ciencias de Benasque "Pedro Pascual" who made this successful meeting possible.

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