

PROCEEDINGS OF THE 3RD WORKSHOP
ON QUANTUM CHAOS AND LOCALISATION
PHENOMENA

Warsaw, Poland, May 25–27, 2007

Editors of the Proceedings

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Foundation "Pro-Physica"

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Foreword

The 3rd Workshop on Quantum Chaos and Localisation Phenomena was held in Warsaw, Poland, from 25th to 27th May, 2007 at the Institute of Physics of Polish Academy of Sciences. The Workshop was organized by the Institute of Physics, the Centre for Theoretical Physics of the Polish Academy of Sciences, and the Foundation “Pro-Physica”. The meeting continued the series of the workshops, which started in 2003. Traditionally, the main objectives of the Workshop were the assessment of achievements and the formulation of directions of a new research on quantum chaos and localisation phenomena.

There were about 50 participants of the 3rd Workshop on Quantum Chaos and Localisation Phenomena representing experimental and theoretical physicists. Almost half of them were the Ph.D. students. During the meeting 11 invited lectures, 4 contributed lectures, and 6 posters were presented. The presentations were focused on the following topics: quantum chaos and non-linear classical systems, quantum and microwave graphs, atoms in strong electromagnetic fields, chaos versus coherent effects in multiple scattering, Anderson localisation, quantum chaos and quantum computing, and entanglement and noise. On behalf of the organizers we would like to express our gratitude to all speakers and the authors of the posters for their contribution to the success of the Workshop.

We present the Proceedings of the 3rd Workshop on Quantum Chaos and Localisation Phenomena, in which 8 invited and all contributed lectures are published. The editors are very grateful to the Referees for ensuring the highest quality of the Proceedings.

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List of the Speakers

1. Steven M. Anlage (College Park, USA)
2. Andreas Buchleitner (Dresden, Germany)
3. Valerio Cappellini (Cracow, Poland)
4. Giulio Casati (Italy)
5. Valerie Doya (Nice, France)
6. Piotr Garbaczewski (Opole, Poland)
7. Antonio M. Garcia-Garcia (Princeton, USA)
8. Oleh Hul (Warsaw, Poland)
9. Fabrice Mortessagne (Nice, France)
10. Achim Richter (Darmstadt, Germany)
11. Marian Rusek (Warsaw, Poland)
12. Peter Šeba (Prague, Czech Republic)
13. Hans-Jürgen Sommers (Essen, Germany)
14. Bart Van Tiggelen (France)
15. Jakub Zakrzewski (Cracow, Poland)