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XLVIth Zakopane School of Physics
International Symposium
Breaking Frontiers: Submicron Structures
in Physics and Biology

Zakopane, Poland, May 16–21, 2011

Editors of the Proceedings:

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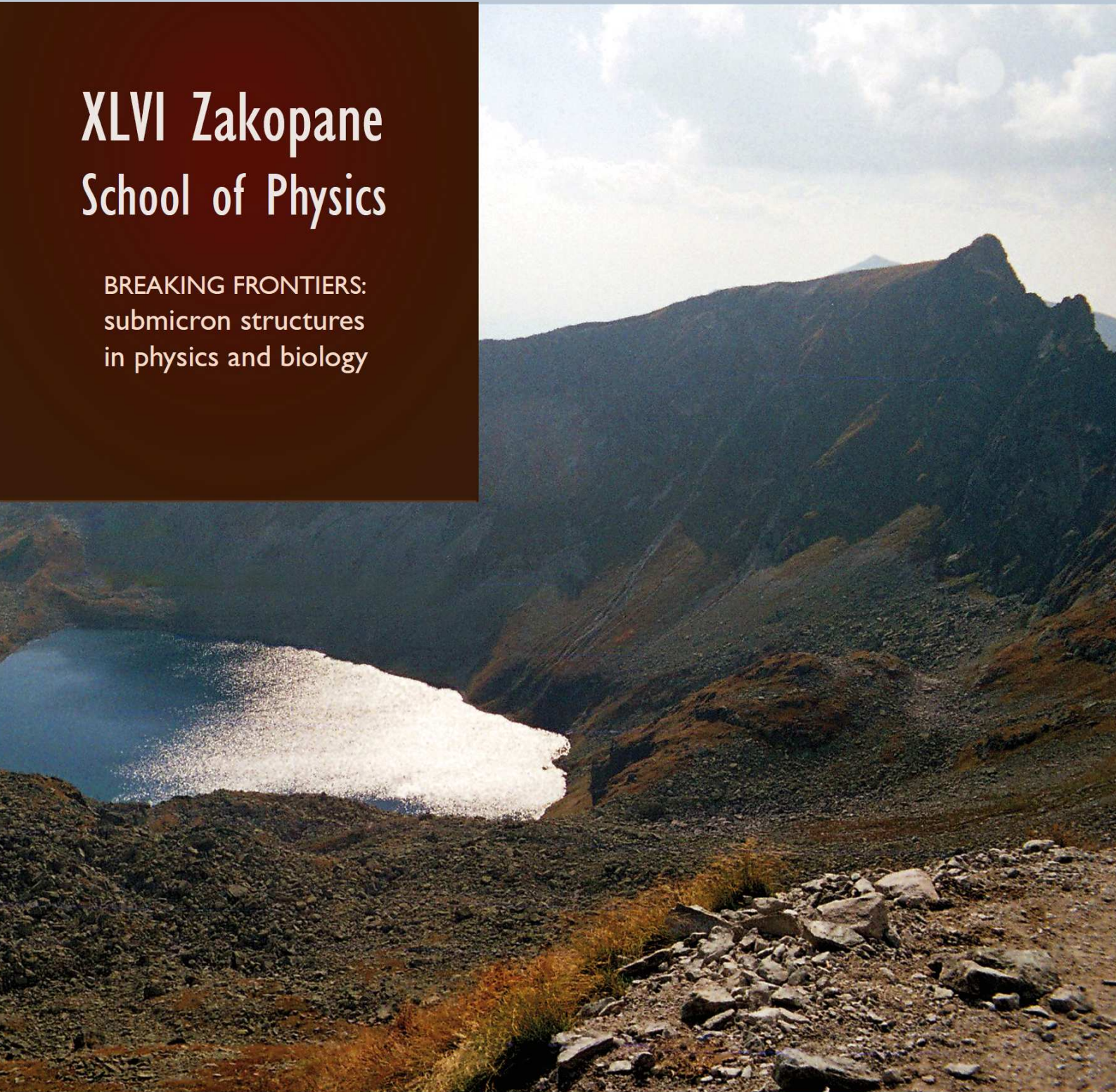
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Zakopane Poland 16 - 21 May, 2011

XLVI Zakopane School of Physics

BREAKING FRONTIERS:
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Preface

Traditionally, the Zakopane School of Physics, International Symposium “Breaking Frontiers: Submicron Structures in Physics and Biology” was held in Zakopane, Poland from 16 to 21 of May, 2011. Our tradition dates back to 1962 when a small group of students and professors decided to combine science with skiing, nature and good entertainment. The School is a place where all participants have the opportunity to learn, share their knowledge and the experience, discuss about recent advances and new techniques employed in physics, chemistry, materials science, biology and medicine. Among 95 participants there were 24 excellent lecturers who are top specialists in the field of material science, biology, physics and chemistry and it was a real pleasure to listen their talks. Besides the invited lecturers, young scientists had given short oral presentations. In addition to those contributions during two poster sessions 38 posters were presented and discussed.

In addition to the scientific program of the Symposium there was a time for informal meetings and discussions which seeded new ideas and friendships. All these, made the School and Symposium very successful and promising for the future development of interdisciplinary study joining physics and biology resulting in valuable scientific work through creation of new cooperations.

The editors wish to thank all the authors and referees for their effort in making these proceedings a valuable set of good quality manuscripts. Special acknowledgments are due to Prof. Witold Dobrowolski and Mr. Zbigniew Gawryś for their understanding, help and assistance in the production of these proceedings. The Committee of Physics and the Office of International Relations of the Polish Academy of Sciences, as well as Hamamatsu Photonics, AM Technologies, COMEF Scientific and Research Equipment and KORIMEX are acknowledged for their generous support which enabled participation of our students in this event.

Such a wonderful School and Symposium would not be possible to organize without the help of our young enthusiastic students who did most of the technical work such as administration of the webpage, design of graphics for the program, edition of the book of abstracts, care of technical devices in conference room and organization of the leisure activities. There are no words to thank them, therefore the simple THANK YOU is the best!

Conference Chairman
Prof. Wojciech M. Kwiatek