44 CRACOW SCHOOL OF THEORETICAL PHYSICS

ZAKOPANE, MAY 28 - JUNE 6, 2004

The Cracow School of Theoretical physics has been organized yearly since 1961. It is located in Zakopane, the mountain resort in the Tatra mountains, 100km (60 miles) south from Cracow, famous historical city and the previous capital of Poland. (see e.g. www.zakopane.pl and www.krakow.pl) The main idea of the School consists in reviewing the important results obtained in particle phenomenology within last year or two. The talks are mainly theoretical, however, reviews of experimental results are also presented. Therefore, strictly speaking, it is not a school in the pure meaning of this word. It gives, however, an opportunity of informal discussions and information exchange between scientists working in different areas of particle physics. Lecture sessions are arranged in the mornings and in the evenings there will be seminar sessions. Afternoons are free for discussions and excursions. One day during the School is free altogether. The written version of the lectures is traditionally published in the School Proceedings by Acta Physica Polonica B. Lectures consist normally of two talks (45+5 min. each). The first talk is intended as an introduction aimed at Ph.D. students, experimentalists and theoreticians working in other fields. Experimental lectures should focus on the physical results and interpretations, rather than on details of experimental setup. Seminars (20 min. each) give an opportunity for young scientists to present their original work.

The main topics of the 44th Cracow School of Theoretical physics include:

• new results in hadron spectroscopy, with emphasis on pentaquarks and on new class of charmed mesons and baryons

•.new results in relativistic heavy ion physics