

PRACE NAUKOWE
 WYŻSZA SZKOŁA PEDAGOGICZNA
 W CZĘSTOCHOWIE

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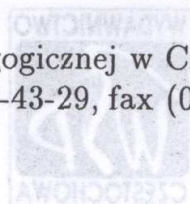
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Preface.

A long time the Institute of Mathematics and Computer Science of Czestochowa Pedagogical University (Poland) collaborates with the Faculty of Education of Jan Evangelista Purkiné University in Ústí nad Labem (Czech Republic). One of the forms of such a collaboration is the Mathematical School organized in succession in Poland and Czech Republic. In 2002 the Institute of Mathematics of Pedagogical University in Cracow (Poland) joined the cooperation. In the near future the cooperation will broaden, and Colleagues from Catholic University in Ružomberok (Slovak Republic) will also organize the Mathematical School.

This issue contains the extended papers presented at the X Polish-Czech Mathematical School (Poraj near Czestochowa, June 4-7, 2003) which created a forum for exchange of scientific achievements and opinions of research workers, represented a broad cross-section of interests and results, brought fresh viewpoint and methods to the participants. The lectures at the Conference were grouped into two Sessions: "Mathematics and Application" and "Mathematics Teaching". According to these topics the papers are also divided into two parts. The fifteen contributions in the first part are the representative of researches carried out in algebra, logic, functional analysis, probability theory, numerical methods, computer science. The fifteen papers contained in the second part address the advances in modern methods and technologies used to teach mathematics in Poland, Czech Republic and Slovak Republic.

The editor of this issue is indebted to the authors for the effort in preparing their contributions, and to the reviewers for their useful comments and suggestions. It is the earnest hope that research in the fields presented in this issue, as well as cooperation between Polish, Czech and Slovak colleagues will broaden.

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