

# IX ENAL

## IX Encontro em Álgebra USP/UNICAMP/UNESP

19 e 22 de setembro de 2001

The ENAL's ("Encontros em Álgebra USP/UNICAMP") are meetings which were started by the algebra research groups of both the Instituto de Matemática e Estatística da Universidade de São Paulo (IME-USP) and the Instituto de Matemática, Estatística e Computação Científica da Universidade de Campinas (IMECC-UNICAMP), with the objective of promoting a greater integration of the algebra people in the state of São Paulo, aiming to research as well as to teaching at the undergraduate and graduate levels. The hope was that this was going to have a direct percussion in the strengthening of the former as well as in the background of our students.

Since the first meeting, which happened in 1993, a remarkable increase of interest in these activities has been observed, both on the part of researchers and students alike. In the case of the first four events, each completed in only one day, we had an average of 6 to 8 talks, for a public of around 30 people coming essentially from USP and UNICAMP.

All meetings, from the fifth to the eighth edition, extended for two days and we always held two events in each of every "odd" year (1993, 1995, 1997, 1999).

Presently, the meeting already counts participants of the three state universities of São Paulo and even of institutions of the neighboring states such as the Federal Universities of Mato Grosso and Paraná and

the State University of Londrina. Beginning in 2001, some significant changes were introduced:

- UNESP joined in, so that the ENAL's began to be sponsored by all three State Universities of São Paulo.
- Only one meeting was planned for the year 2001, in a location other than the "usual"-ones, the cities of São Paulo and Campinas, with a duration of three days. Hence, the IX-ENAL took place at the "Hotel Fazenda Colina Verde", in the touristic resort of São Pedro.
- Two mini-courses were taught, meeting for one hour on each of the three days.
- A posters section was organized.
- The ENALs won their own site in the internet:  
<http://www.ime.unicamp.br/~ixenal>  
where it is possible for participants to publish electronically their works.

During this 9<sup>th</sup> Meeting, besides the mini-courses, three invited 40-minute lectures were given, plus twenty-eight 30-minute talks, for an audience of 37 professors and 39 students, mostly graduate. Due to this large number of talks, it was necessary to organize them in two parallel sections.

A talk entitled "Números transcendentales" continued an initiative started by the organizers in the VII ENAL, which took place in the IME-USP in June of 1999. The idea is to devote some time during the meetings to outstanding subjects in the History of Mathematics and, in particular, in the History of Algebra.

All other talks consisted of recent research results, either submitted or recently accepted for publication in international refereed journals. All were of a high level, shown by the quality of the presentations and by the relevance of the results included. This level of excellence manifestly surpassed the ones reached in previous meetings.

This IX ENAL received an offer from RESENHAS do IMEUSP, to publish articles based on talks given at the meeting, contributed by

some of the speakers, which were submitted and accepted for publication following the usual refereeing process. The organizers are grateful for this and consider that the publication of part of the proceedings in a respected journal can only contribute to the better value not only of the researchers involved but also the of future ENALs in general.

The articles here contained were specially written for the present volume.

Hector Merklen  
pela Comissão Organizadora do  
**IX Encontro em Álgebra**