DAILY NEWS



Workshop and Conference on

1st issue, October 18, 2003

Logic, Algebra, and Arithmetic

Page 1

Invited Speakers



Lou van den Dries



Ali Enayat (also an organizer)



Yuri L. Ershov



Iraj Kalantari (also an organizer)



Franz-Viktor Kuhlmann



Salma Kuhlmann



Anand Pillay (arriving on Monday)



Albert Visser



Participation of invited speaker, **Prof. Angus Macintyre**, from the University of Edinburgh is regretfully canceled as of Oct. 13 due to a very severe family health problem. Due to cancellation of presence of Angus at the meeting, the second hour assigned to him on Wed. is now devoted to short presentations by some of the other invited speakers and maybe of the organizers reporting on some aspects of his work in Mathematical Logic and possibly their collaborations with him.

In the first assigned hour tomorrow at 11:40, a recorded 1998 talk by him is presented, subject to technical matters allowing this.

Did you know that ...

The **London Mathematical Society (LMS)** awards several Prizes each year for achievements in and contributions to Mathematics. There are six Prizes and one Medal awarded regularly by Council: the De Morgan Medal (triennial), the **Polya Prize** (two years out of three), the Senior Berwick Prize, the Senior Whitehead Prize, the Naylor Prize and Lectureship, the Berwick Prize (biennial) and the Whitehead Prizes (annual).

The Polya Prize is awarded in recognition of outstanding creativity in, imaginative exposition of, or distinguished contribution to, mathematics within the United Kingdom.

Professor Macintyre received the 2003 Polya Prize for his widely influential contributions to model theory and its applications.

Past winners of the Pólya Prize are:

- 1987 J.H. CONWAY
- 1988 C.T.C. WALL
- 1990 G.B. SEGAL
- 1991 I.G. MACDONALD
- 1993 D. REES
- 1994 D. WILLIAMS
- 1996 D.E. EDMUNDS
- 1997 J.M. HAMMERSLEY
- 1999 S.K. DONALDSON
- 2000 T.J. LYONS
- 2002 N.J. HITCHIN
- 2003 A.J. MACINTYRE

The idea of holding a meeting of this kind at IPM was initiated more than a year ago by Prof. Khosrovshahi.

It took some time for some of the logicians around here to feel confident enough to form the local organizing committee which was soon complemented by A. Enayat, who had a two-week visit here last winter, and I. Kalantari. These two people also kindly accepted the invitation to present talks at the workshop. The committee tried to do the best at many and various stages like nominating people to be invited (the success in this aspect can not be denied, just look at the names on the pervious page!).



G. B. Khosrovshahi

establishing efficient and clear communications, issuing precise announcements locally, holding a handy website up-to-date, etc. We also paid attention to proper publicity and contacted people for possibly contributing a paper to the conference part of the meeting or to just participate and make a benefit to oneself and the meeting. Among the self-registered or those invited-to-participate, there are now people specializing in various fields in Mathematics, and that's good news if the subject is going to be more identified and promoted in the country due to the meeting. This way our colleagues in other parts of Mathematics will hopefully get a rough sense of what this rather particular subject is all about. For younger people earlier in their career, this could be a more realistic invitation to this kind of fun. Enjoy the meeting and please forgive us for the surely remaining deficiencies, let us hear your comments.

Local Organizing Committee



Mohammad Ardeshir



Seyed Mohammad Bagheri



Mohammad Javad A. Larijani



Mojtaba Moniri



Morteza Moniri



Massoud Pourmahdian

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Page 3

Mathematical Logic and Foundations at IPM by the Year 2003

In the past several years, areas of study have included topics in:

- Philosophical logic: definite descriptions, proper names, theories of truth, theories of meaning in natural languages and mind, justifying believes independent from experience, analysis of certain essentialist theses in quantified modal logic, theories of vagueness, etc. (later followed in the School of Intelligent Systems, now Cognitive Sciences.)
- General Logic: subsystems of classical logic, especially intuitionistic logic and basic logic, logic of natural languages, logic in computer science.
- Model Theory: stability theory, simple theories, model-theoretic algebra, models of arithmetic and set theory, ominimality and its variants.
- Proof theory: complexity of proofs, first order arithmetic, weak arithmetics and interactions with complexity theory, constructive mathematics, intuitionistic mathematics.

A little more in the past but not necessarily terminating, there have also been interests and activities in *computability theory* and in *set theory*, especially when (as of course is also the case for the above more highlighted areas), there have been visiting scientists specializing in those, as is the case at this occasion of the **Workshop and Conference on Logic, Algebra, and Arithmetic**. The same also applies to the fields of *constructive and recursive analysis*, *categorical logic*, and *non-standard models in Mathematics*. Certain areas *in theoretical computer science* have been of interest too (recently there is also a School of Computer Science at IPM).

In the last ten years or so the group has had a dozen members (some of whom students) on and off, two post-doc's, and several distinguished short and mid-term visitors. There is an ongoing (or at least peculiar to the two current students besides the three graduated!) PhD program in the field. There have been seminars and courses held by the group or supported by the Institute (elsewhere in some cases) in the above and other related areas.

Daily Program					
9:00-9:20	9:20-10:00	10:00-10:30	10:30-11:30	11:30-11:40	11:40-12:40
Registration	Opening		L. van den Dries (I)	Break	A. Visser (I)
12:40-14:00	14:00-15:00	15:00-15:10	15:10-16:10	16:10-17:30	17:30
Baghali Polo	S. Kuhlmann (I)	Break	General Talk (1) F-V Kuhlmann (I)	Reception	Guest House
From 23:00 Have a nice sleep!					

Some very fresh pictures!

Page 4









