Second Announcement

The Department of Education of the University of Crete

organizes the

4th Colloquium on the Didactics of Mathematics with international participation

website: http://www.edc.uoc.gr/4colloquium

The colloquium will take place at the

University of Crete, Friday 22 & Saturday 23 April 2005 University Campus of Rethymnon, Crete, Greece, Auditoria & Lecture Rooms Δ6, Δ7, Γ2, B1-29

The themes of the colloquium are:

- The teaching and learning of Geometry
- The teaching and learning of Statistics and Probability
- The interrelationship between Mathematics and Physics: Didactical issues
- *The didactical value of the history and epistemology of Mathematics*
- Possible causes of failure to teach and to learn Mathematics
- Alternative methods of teaching Mathematics

Each presentation will be assigned a **25**-minute slot, including the follow-up discussion and the official languages of the *Colloquium* are Greek, English and French.

Abstracts of proposed presentations have been submitted before October 10, 2004 and the full papers were submitted before December 10, 2004, have been reviewed by the members of the *Scientific Committee* and authors were notified about the acceptance, or need for revision of their papers before January 31, 2005.

The website of the *Colloquium* is <u>http://www.edc.uoc.gr/4colloquium</u>, in operation since September 2004.

The abstracts of the full papers that will be finally accepted after any eventual revisions will be posted on this website. Accepted full papers will be included in the *Proceedings* and will be written in one of the official languages of the *Colloquium* (Greek, English, or French). For each presentation in Greek, there will be an abstract either in English, or in French. It is expected that the *Proceedings* will be available by the end of 2005 and hard copies will be sent to all participants via ordinary mail. Alike the previous three colloquia, the *Proceedings*

will be disposed to a large number of individuals and institutions outside Greece¹.

Due to the wide response to the call for papers (about 60 papers have been submitted, from 16 different countries, worldwide), it is expected that the *Proceedings* will appear in two volumes; one with the papers that are written in Greek, with abstracts of all others in Greek; one with the papers written in English or French, with an abstract in English for each paper that has been written in Greek. The papers of the invited speakers will appear both in the original and translated in Greek.

PRACTICAL INFORMATION

VENUE:

(1) <u>By airplane</u>: There are many domestic flights from Athens to either Iraklion, or Chania;

Take a taxi from the airport to the bus station for Rethymnon.

<u>Arrival at Iraklion airport</u>: The most convenient way to go to the bus station is to take a taxi (taxi fare about $5 \in$). From Iraklion to Rethymnon it takes about 1h 30min by bus (75km; the bus ticket costs $6.5 \in$) and about 1h by taxi (taxi fare about $60 \in$).

<u>Arrival at Chania airport</u>: The airport is far from the city between Rethymnon and Chania (taxi fare about 16€ from Chania airport to the bus station in the city). From Chania to Rethymnon it takes about 1h 15min by bus (60km; the bus ticket costs 6€) and about 50min by taxi (taxi fare about 45€).

(2) <u>By boat</u>, daily from Pireaus, to:

- Rethymnon: By ANEK lines, departure 8:00pm, arrival 5:30am

- Iraklion: By ANEK lines, departure 8:30pm, arrival 5:30am

By MINOAN lines departure 8:30pm, arrival 5:30am

then by bus to Rethymnon (from Iraklion: 75km, about 1h 30min; from Chania: 60km, about 50min).

-Chania: By ANEK lines departure 9:00pm, arrival 5:30am

then by bus to Rethymnon (from Iraklion:75km, about 1h 30min; from Chania: 60km, about 50min)

Notice that there are no buses from Chania, or Iraklion to Rethymnon after 9:00pm. For more details about the bus timetable visit the site

http://www.bus-service-crete-ktel.com/timetables2.html

ACCOMODATION: Rethymnon is a small touristic city of 20000 population, with many hotels, apartments, etc. For the participants' convenience, the *Organizing Committee* has made special arrangements with some hotels and it is the participants' responsibility to make their reservation by directly contacting the hotel of their preference. More information is available on the website of the *Colloquium*.

¹The proceedings of the 2nd and the 3rd colloquium have been published and are currently been distributed (the proceedings of the 1st colloquium are out of stock). The cost of each volume is 9 euros. For volume purchases please contact Dr Tzanakis, Department of Education, University of Crete, Rethymnon 74100 (tel. 28310-77529, e-mail: tzanakis@edc.uoc.gr).

PLACE: All talks will be delivered in **Amphitheatres** $\Delta 6$, $\Delta 7$, $\Gamma 1$ and **Lecture Room B1- 29** at the **University Campus** of Gallos, in Rethymnon. You can take a bus from the city (many bus stops along the main road, Kountourioti Avenue, the ticket costs $1 \in$), or you can take a taxi (the taxi fare is about $\in 3$).

PROGRAMME: The final programme of the *Colloquium*, together with the abstracts of all accepted presentations will be announced once all papers that are subjected to revision have been resubmitted and checked.

For any additional information, please, contact Dr. C. Tzanakis, Department of Education, University of Crete, University Campus, Rethymnon 74100, Crete, Greece Tel: 30(28310)77629 Fax: 30(28310)77596 e-mail: tzanakis@edc.uoc.gr

Updated information on the programme of the colloquium and further practical details can be retrieved from its website: <u>http://www.edc.uoc.gr/4colloquium</u>

INVITED SPEAKERS

Alike the previous colloquia, prominent invited speakers will participate in this Colloquium. The following have accepted to give plenary talks:

Fulvia Furinghetti,

Dipartimento di Matematica, Università di Genova, Genova, Italy The history of mathematics and teachers' education

Celia Hoyles & Richard Noss,

School of Mathematics, Science and Technology, Institute of Education, University of London UK

Designing Mathematical Learning Environments for Collaboration at a Distance

François Pluvinage,

Département des Mathématiques, Université L. Pasteur de Strasbourg, France *Mathematiques d'un point de vue didactique*

Gert Schubring,

IDM / Institut für Didaktik der Mathematik, Universität Bielefeld, Bielefeld, Germany Generalizing the concept of multiplication - Epistemological implications of the relation between quantity and number

SCIENTIFIC COMMITTEE

- Arcavi A., Department of Science Teaching, Weizmann Institute of Science, Israel
- Barbin E., Université de Nantes, IREM-Centre F. Viète, France
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- Elidrissi A., Ecole Normale Supèrieure, Morocco

- FitzSimons G., Monash University, Victoria, Australia
- Gagatsis, A., Department of Education, University of Cyprus, Cyprus
- Hatzikyriakou K., Department of Education, University of Thessaly, Greece
- Isoda M., Institute of Education, University of Tsukuba, Japan
- *Kalavasis F.*, Department of Sciences of Pre-Primary Education & of Educational Design, University of the Aegean, Greece
- *Kaldrymidou M.*, Department of Pre-primary Education, University of Ioannina, Greece
- Kastanis N., Department of Mathematics, University of Thessaloniki, Greece
- Kourkoulos M., Department of Education, University of Crete, Greece
- Kourouniotis C., Department of Mathematics, University of Crete, Greece
- *Kronfellner M.,* Institut für Algebra & Computermathematik, Technische Universität Wien, Austria
- Lambrou M., Department of Mathematics, University of Crete, Greece
- Lemonidis C., Department of Education, University of Thessaloniki, Greece
- Makrakis V., Department of Education, University of Crete, Greece
- *Milkova E.*, Department of Informatics, University of Hradec Kralove, Czech Republic
- Mihailidis P., Department of Education, University of Crete, Greece
- Negrepontis S., Department of Mathematics, University of Athens, Greece
- Papastavridis S., Department of Mathematics, University of Athens, Greece.
- *Pluvinage F.*, Département des Mathématiques, Université L. Pasteur de Strasbourg, France
- Potari D., Department of Education, University of Patras, Greece
- Radford L., Ecole des Sciences de l' Education, Laurentian University, Canada
- Rauscher J-C., I.U.F.M d' Alsace, France
- Sakonidis C., Department of Education, University of Thrace, Greece
- Siu M-K., Department of Mathematics, University of Hong-Kong, China
- Thomaidis Y., Experimental high school of the University of Macedonia, Greece
- Triantafyllidis T., Department of Education, University of Thessaly, Greece
- Troulis G., Department of Education, University of Crete, Greece.
- Tzanakis K., Department of Education, University of Crete, Greece
- *Tzekaki M.*, Department of Pre-primary Education, University of Thessaloniki, Greece
- Yamalidou M., Dr. of the History of Science
- Zachariades Th., Department of Mathematics, University of Athens, Greece
- Zormbala K., Department of Mathematics, University of the Aegean, Greece

ORGANIZING COMMITTEE

Pyrgiotakis I., Head of the Department

Kourkoulos M., co-chair	Anagnostakis G.,	Karatasos N.
Troulis G., co-chair	Foskolou I.	Karvounis L.,
Tzanakis C., co-chair	Halepaki G.,	Mandadakis E.
	Halepaki M.,	Nikolidakis E.,
	Ioakeimidis P.,	Periklidakis G.
	Kalaitzidaki M.,	Zarkadi T.

THE COLLOQUIA ON THE DIDACTICS OF MATHEMATICS AT THE UNIVERSITY OF CRETE

The *Colloquium on the Didactics of Mathematics (with international participation)* is organized by the Department of Education of the University of Crete, every two years since 1998. It takes place in April just before the Easter vacations, so that it is easier for speakers to come either from other parts of Greece, or abroad, and for the local educational community (from elementary school, to the university) to participate to it.

The previous Colloquia were as follows:

1st Colloquium, 10-11 April1998,

2nd Colloquium, 21-22 April 2000

3rd Colloquium, 18-19 April 2003

4th Colloquium, 22-23 April 2005

and included plenary talks by distinguished invited speakers from Greece, or abroad, as well as, oral presentations that have been blindly reviewed by the *Scientific Committee*. In the 4th *Colloquium*, the call for paper was announced internationally and there was wide response from many countries (about half of the 60 submitted papers came from 15 countries, other than Greece).

These *Colloquia* are attended by about 250 participants (school and university teachers, students of Mathematics and Education, researchers in Mathematics Education etc). It should be noticed that distinguished invited speakers have given plenary talks in these *Colloquia*², and that all presented papers are published in the *Colloquium*'s Proceedings. This *Colloquium* is an already established event, regularly organized and aiming at bringing together researchers in Mathematics Education from Greece and abroad and informing the local academic and educational community on recent developments and trends on the Didactics of Mathematics and related domains.

² E.g. G. Brousseau, J. Fauvel, G. Vergnaud, C. Hoyles and others.