

Event: II International Conference on Applied Mathematics and Informatics, ICAMI 2013, <http://matematicas.univalle.edu.co/icami/2013/>
Dates: November 24 – 29, 2013
Place: San Andres Island – COLOMBIA
Submitted by: Olga Vasilieva, ICAMI 2013 Organizing Committee Chair
olga.vasilieva@correounivalle.edu.co

Final Report

ORGANIZATION

The *II International Conference on Applied Mathematics and Informatics – ICAMI 2013* was the second official academic event of the REALMA Network (*Réseau Europa – Amérique Latine en Maths Appliquées*, <http://www.realma.org>), headed by the University of Antilles-Guyana, Guadeloupe – France. At the moment, REALMA has fifteen institutional members from 12 countries (Europe, Latin America and the Caribbean). Formal session of REALMA representatives (held on November 29, 2013 in San Andres) has approved the application of Universidad Nacional de Colombia to join the network from 2014. REALMA will receive applications to host next ICAMI 2016 event until September 30, 2014. ICAMI continues as an official congress series of the REALMA network.

CONFERENCE PROGRAM

The ICAMI 2013 Final Program included:

- **10 plenary lectures** by outstanding mathematicians.
- **5 invited lectures** by internationally recognized scholars.
- **4 mini-symposia** (22 presentations):
 - *Geometric control and applications* - 6 presentations;
 - *Geometry, filters and patterns in medical applications* – 7 presentations;
 - *Inverse problems and their applications* – 4 presentations;
 - *Mathematics of Communications* – 5 presentations.
- **113 contributed papers** divided in 11 thematic sections (streams):
 - *Analysis and mathematical physics* – 11 presentations;
 - *Applied analysis and geometry* – 9 presentations;
 - *Applied probability, statistics and stochastic processes* – 16 presentations;
 - *Continuous and discrete dynamic systems* – 8 presentations;
 - *Game theory and other economics applications* – 3 presentations;
 - *Mathematical epidemiology and biosciences* – 22 presentations;
 - *Mathematical geosciences* – 8 presentations;
 - *Numerical methods and software tools* – 9 presentations;

- *Operations research, optimization methods and applications* – 18 presentations;
 - *Partial differential equations and applications* – 9 presentations.
- **2 poster sessions** (49 contributions).

PARTICIPANTS

There were 247 participants from 23 different countries: Argentina (5), Austria (1), Brazil (2), Chile (5), Colombia (194), Finland (1), France (3), Germany (5), Guadeloupe (1), Guatemala (1), Italy (1), Japan (3), Mexico (4), Norway (4), Panama (1), Peru (1), Portugal (1), Russia (2), South Korea (1), Spain (2), Turkey (1), United Kingdom (1), United States of America (7).

It is worth noting that there were 82 students participating in the conference (undergraduate, master, and doctor course); they have presented 18 short communications and 32 posters (20% of all contributions).

TRAVEL GRANTS

One plenary speaker was supported by DAAD full travel grant. *Universidad Nacional de Colombia* provided full travel support for one plenary speaker. One invited speaker received full travel support from JSPS Government Foundation (Japan).

Two plenary and one invited speakers have received airfare from COLCIENCIAS (Colombian Science and Technology Foundation).

Five plenary and one invited speakers have received airfare from ICETEX Visiting Professor's Program of Colombian Government.

REALMA Network had provided three air tickets: one for plenary speaker and two for of invited speakers.

Lodging expenses for eight plenary and four invited speakers were covered by 11 Colombian universities participating in the organization of the ICAMI 2013 event.

Besides ICIAM, two other international organizations have provided partial travel support for ICAMI 2013 participants coming from developing countries – International Centre for Theoretical Physics (ICTP, 6 participants) and Society for Mathematical Biology (SMB, 2 participants).

PUBLICATIONS

The organizers have published a book "*A commemorative synopsis - ICAMI*" [ISBN 978-958-765-077-8, 255 pages, Editors: J. J. Duque and O. Vasilieva] that includes abstracts of all contributions presented at the conference (plenary lectures, short communications, and posters).

There will be a special issue of the journal "*WSEAS Transactions on Mathematics*" (ISSN: 1109-2769) with selected papers based on presentations made at ICAMI

2013 event. This publication will be carried out by invitation only. We have sent our book of abstracts to the Editorial Board of this journal. Further, they will invite some authors of selected presentations to submit the extended versions of their paper for publication. The organizers will not mediate this process.

Additionally, we have signed a publishing contract with SPRINGER to publish a special volume of Springer Proceeding on Mathematics and Statistics titled “*Current Trends in Applied Mathematical Science*” (PROMS series, ISSN 2194-1009; Editors: Gerard Olivar and Olga Vasilieva). The deadline for submission of full-size papers is February 15, 2014 and all ICAMI 2013 participants who made presentations at the conference (plenary lectures, oral communications or posters) are invited to submit a full-size paper to this volume. The peer-review process will be carried out by the ICAMI 2013 Program Committee members and external reviewers.

FOLLOW-UP ACTIVITIES

ICAMI events are established as an official conference series of the REALMA Network. Next ICAMI conference will be held in 2016. REALMA Network will receive formal applications to host the ICAMI 2016 event until September 30, 2014.

The organizers have sent to all ICAMI 2013 participants an electronic questionnaire (http://www.icami2013.org/2013/form_eval/?id=af8405342457beab245f43e16dc0f851&idioma=ES) to all participants who attended the conference in order to find out what were the highlights and weak point of the organization. This kind of feedback will be helpful to the organizers of ICAMI 2016.

ICIAM FELLOWS

Before publishing a “Call for ICIAM Fellowship Applications” at ICAMI 2013 website, an ICIAM Steering Committee was formed:

Chair: Professor Jorge Franco, *Universidad del Valle*, Cali – COLOMBIA
jorge.franco@correounivalle.edu.co

Members: Paula Gonzalez, *Universidad Autonoma de Occidente*, Cali - COLOMBIA
Anibal Sosa, *Universidad ICESI*, Cali – COLOMBIA

This Committee received **27 applications** for financial support and after careful screening **fourteen** ICIAM Fellows were selected; other two candidates were placed on a “Waiting list”, in the case of possible withdrawals or “no shows” by any of initially selected candidates.

In effect, there were two “no shows”:

- Luis Miguel MENDEZ DIAZ from Mexico (amount assigned: US\$ 250) and
- Alireza MOHEBI ASHTIANI from Brazil (amount assigned: US\$ 250)

have not appeared in San Andres and have never replied to our emails. The corresponding amounts of US\$ 250 each were then used to support two candidates from the “Waiting list” – Ruben Spies (Argentina) and Francisco Ramirez (Colombia).

The following table provides the detailed list of the ICIAM Fellows:

Full Name and Identification	Position, institution, country, and email	Grant value (US\$)
Johnny VALENCIA CALVO National ID No. 1.080.646.551	Ph.D. Student in Systems Engineering and Computer Sciences, Universidad Nacional de Colombia, Medellin – Colombia, jovalenciocal@unal.edu.co	250
Javier IDÁRRAGA GARCÍA National ID No. 75.089.246	Ph.D. Candidate, Graduate Program of Geophysics, Universidad Nacional de Colombia, Bogota – Colombia, jidarragaq@unal.edu.co	250
Hernán Darío TORO National ID No. 18.492.637	Ph.D. Student in Applied Mathematics at Universidad Nacional de Colombia, Manizales – Colombia and lecturer at Universidad del Quindío, Armenia – Colombia, hdtoro@uniquindio.edu.co	250
Daniel MOLANO National ID No. 80.190.051	Ph.D student in Astronomy at Universidad Nacional de Colombia, Bogota – Colombia and lecturer at Universidad Sergio Arboleda, Bogota – Colombia, damolano@unal.edu.co	250
Diana Carolina ERAZO QUINTERO National ID No. 1.020.732.288	M.Sc. Student in Environmental Engineering and Management, Universidad de los Andes, Bogota – Colombia, dc.erazo170@uniandes.edu.co	250
Laura Vanessa GÓMEZ BERMEO National ID No. 1.136.881.611	M.Sc. in Applied Mathematics, Universidad Sergio Arboleda, Colombia, laura.gomez@ima.usergioarboleda.edu.co	250
Primitivo Belen ACOSTA HUMÁNEZ National ID No. 78.714.847	Ph.D., Professor in Applied Mathematics at Universidad del Norte, Barranquilla – Colombia, pacostahumanez@uninorte.edu.co	250
Mauricio OSORIO National ID No. 75.081.065	Ph. D., Professor in Applied Mathematics at Universidad Nacional de Colombia, Medellin – Colombia, maosorio@unal.edu.co	250
Francisco Javier RAMIREZ GIL National ID No: 1.037.544.577	M.Sc. Student in Mechanical Engineering, Universidad Nacional de Colombia, Medellin – Colombia, firamireg@unal.edu.co	250

Broderick CRAWFORD LABRÍN Passport No. 9.888.562-5	Ph.D., Professor in Information Engineering at Pontificia Universidad Catolica de Valparaiso, Valparaiso – Chile, broderick.crawford@ucv.cl	250
Héctor Ariel RAMÍREZ CABRERA Passport No. 13.239.549-7	Ph.D. Associate Professor at CMM – Universidad de Chile, Santiago – Chile, hramirez@dim.uchile.cl	250
Mariano FRUTOS Passport No. AAA939451	Ph.D., Associate Professor in Applied Mathematics at Universidad Nacional del Sur and CONICET, Bahia Blanca – Argentina, mfrutos@uns.edu.ar	250
Ruben Daniel SPIES Passport No. 16017883N	Ph.D., Professor in Applied Mathematics at Instituto de Matemática Aplicada del Litoral, Santa Fe – Argentina, ruben.spies@gmail.com	250
Francisco Henrique DE FREITAS VIANA Passport No. FI848462	Ph.D., Assistant Professor in Information Sciences at Federal Center of Technological Education – CEFET, Rio-de-Janeiro – Brazil, henrique.viana@gmail.com	250
TOTAL AMOUNT:		US\$ 3.500

NOTE: All **fourteen** beneficiaries of ICIAM travel support had signed formal receipts and left copies of their ID (passport or national ID Card) and boarding passes; the organizers can send these document to ICIAM office by regular mail or e-mail (as scanned documents).