

CIMPA-UNESCO-REALMA-COLOMBIA School Mathematics for Modeling and Simulation, Cali–Colombia, June 11 - 22, 2007

The purpose of the school is to introduce the students to some advances and new trends in Applied Mathematics. The main emphasis will be to reveal the important role of applied mathematics for other sciences (engineering branches, image processing, biology, and economics) and to provide students and young researchers with basic tools for modeling and simulation of real-life problems. The school will draw attention on active areas of research in Applied Mathematics and will facilitate the contacts between the students coming from various Latin-American countries and internationally recognized experts.

The school will be organized within the framework of the Europe-Latin America Network in Applied Mathematics (REALMA) whose objective is to promote and enhance continuous education in the area of applied mathematics in the region of Latin America and the Caribbean.

All participants are welcomed to submit contributions, related to their current research, for further presentation and discussion at several thematic sessions. Extended abstract will be revised by the Scientific Committee members and should be submitted to cimpa@univalle.edu.co before the registration deadline of March 15, 2007. Please find the template in MS Word format [here](#).

School coordinators

Marc Lassonde (Université de Antilles-Guyana, France)
Olga Vasilieva (Universidad del Valle, Colombia)

Scientific committee:

Hector de Arazoza (Universidad de la Habana, Cuba)
Patrick Combettes (Université de Paris 6, France)
Jairo Duque (Universidad del Valle, Colombia)
Juergen Guddat (Humboldt University – Berlin, Germany)
Rene Meziat (Universidad de los Andes, Colombia)
Marc Lassonde (Université de Antilles-Guyana, France)
Felipe Linares (IMPA, Rio de Janeiro, Brazil)
Irina Markina (University of Bergen, Norway)
Javier Peña (Carnegie Mellon University, Pittsburg, EE.UU.)
Marcus Sarkis (IMPA, Rio de Janeiro, Brazil)
Sylvain Sorin (Université de Paris 6, France)
Alexander Vasiliev (University of Bergen, Norway)

Jesús Velásquez (Decision Ware Ltd., Bogota, Colombia)
Jorge Zubelli (IMPA, Rio de Janeiro, Brazil)

Local organizing committee:

Olga Vasilieva (Universidad del Valle, Cali, Colombia)
René Meziat (Universidad de los Andes, Bogota, Colombia)
Julio Delgado (Universidad del Valle, Cali, Colombia)
Juan Carlos Muñoz (Universidad del Valle, Cali, Colombia)
Jorge Franco (Universidad del Valle, Cali, Colombia)

Courses

- Fixed point methods in image recovery (8 hours, Patrick Combettes, Université de Paris 6, France)
- Hele-Shaw flows, bosonic strings and engineering applications (8 hours, Alexander Vasiliev, University of Bergen, Norway)
- Mathematical models for epidemiology (6 hours, Hector de Arazoza, Universidad de la Habana, Cuba)
- Smoothing techniques for non-smooth convex optimization (6 hours, Javier Peña, Carnegie Mellon University, Pittsburg, USA)
- Domain Decomposition Methods and Iterative Methods (6 hours, Marcus Sarkis, IMPA, Rio de Janeiro, Brazil)
- Dynamics and evolutionary games (6 hours, Sylvain Sorin, Université de Paris 6, France)

Tutorials

- Free software tools for scientific computing (1.5 hours, Jairo Duque, Universidad del Valle, Cali, Colombia)
- Parallel computing and cluster computers (1.5 hours, Jairo Duque, Universidad del Valle, Cali, Colombia)
- Introduction to parametric optimization (1.5 hours, Juergen Guddat, Humboldt University, Berlin, Germany)
- Smoothing Properties for Solutions to Dispersive Equations (1.5 hours, Felipe Linares, IMPA, Rio de Janeiro, Brazil)
- Potential theory: the origin and applications (1.5 hours, Irina Markina, University of Bergen, Norway)

- Planning of the supply chains: offer-chain and demand-chain (1.5 hours, Jesus Velásquez, Decision Ware, Ltd., Bogota, Colombia)
- Inverse Problems for Semiconductors: Models and Methods (1.5 hours, Jorge Zubelli, IMPA, Rio de Janeiro, Brazil)

XVI CONGRESO NACIONAL DE MATEMÁTICAS, Medellín–Colombia, julio 16–19, 2007

El XVI Congreso Nacional de Matemáticas se realizará del 16 al 19 de Julio de 2007 en Medellín, Colombia, en las instalaciones del Centro Internacional de Convenciones. Además se harán conferencias divulgativas en el Parque Explora, en el Auditorio EPM, en el Orquideorama. Se espera contar con una asistencia aproximada de 1200 personas al evento, incluyendo 57 conferencistas internacionales, 100 conferencistas nacionales, 100 profesores universitarios asistentes, 300 estudiantes de pregrado, 150 estudiantes de posgrado (Especialización, Maestría y Doctorado) y 500 educadores de matemáticas. El Presidente Honorario del Congreso es el matemático Sergio Fajardo Valderama, Alcalde de Medellín.

Comité científico:

Federico Ardila	Alfonso Castro	Jaime Lesmes
Xavier Caicedo	Jorge Cossio	Leonardo Rendón
Jairo Eloy Castellanos	María Falk de Losada	Tatiana Toro

Comité por áreas:

Educación, historia y filosofía

María Falk de Losada (Universidad Antonio Nariño)
 Diana Jaramillo (Universidad Industrial de Santander)
 Elizabeth Montoya (Secretaría de Educación, Municipio de Medellín)
 José Alberto Rúa (Universidad de Medellín)
 Clara Helena Sánchez (Universidad Nacional de Colombia – Bogotá)

Algebra, teoría de números y combinatoria

Hernán Giraldo (Universidad de Antioquia)
 Carlos Trujillo (Universidad del Cauca)
 Oswaldo Lezama (Universidad Nacional de Colombia – Bogotá)

Análisis y ecuaciones diferenciales

Jorge Mejía (Universidad Nacional de Colombia – Medellín)
 Jaime Arango (Universidad del Valle)
 Félix Soriano (Universidad Nacional de Colombia – Bogotá)

Divulgación en matemáticas

Jorge Alberto Bedoya (Universidad de Medellín)
 Luis Fernando Echeverri (Universidad de Antioquia)
 Pedro Vicente Esteban (Universidad EAFIT)
 Guillermo León López (Pontificia Universidad Bolivariana)
 Elizabeth Montoya (Secretaría de Educación, Municipio de Medellín)
 Débora Tejada (Universidad Nacional de Colombia – Medellín)

Geometría y topología

Gonzalo García (Universidad del Valle)
 Marlio Paredes (Universidad Industrial de Santander)
 Bernardo Uribe (Universidad de los Andes)

Lógica

Xavier Caicedo (Universidad de los Andes)
 Luis Jaime Corredor (Universidad de los Andes)
 Andrés Villaveces (Universidad Nacional de Colombia – Bogotá)

**XVII COLOQUIO LATINOAMERICANO DE ÁLGEBRA,
 Medellín–Colombia, julio 23–27, 2007**

La XVII versión del Coloquio Latinoamericano de Álgebra (CLA XVII) tendrá como sede la ciudad de Medellín, Colombia. Durante los días 23-27 de Julio de 2007. Como antesala al CLA XVII, se pretende realizar una Escuela de Álgebra dirigida a estudiantes en todos los niveles que tengan un interés especial por el álgebra.

Comité organizador local

Hernán Giraldo (Universidad de Antioquia)
 Carlos Trujillo (Universidad del Cauca)
 Mario Estrada (Universidad de Antioquia)
 Juan Diego Vélez (Universidad Nacional de Colombia)
 Gilberto García (Universidad de Antioquia)
 Faber Gómez (Universidad de Antioquia)
 Juan Miguel Velásquez (Universidad del Valle)

Organizador regional

Ismael Gutiérrez (Atlántico)
 Alvaro Garzón (Valle)
 Carlos Montenegro (Bogotá)
 Grupo álgebra, teoría de números y aplicaciones, ERM. ALTENUA

VII AMERICAS SCHOOL IN DIFFERENTIAL EQUATIONS AND NONLINEAR ANALYSIS, July 23–27, 2007, Cartagena-Colombia

The VII Americas School in Differential Equations will gather world experts and mathematics professors and students in the Americas to exchange ideas and results in the state of the art in the various subfields of differential equations and nonlinear analysis for the purpose of enhancing ongoing research collaborations, opportunities for new collaborations, and opportunities for graduate studies and postdoctoral positions. This event will be a continuation and an extension of the bi-annual Americas Conference Series on Differential Equations and Nonlinear Analysis, which started in 1994 and has held meetings in Mexico, Brazil, USA, Venezuela, Canada, and Chile.

This school will be hosted by the Universidad de Cartagena, and the Colombian mathematical community at large, in a charming historical building in the City of Cartagena. Cartagena is easily accessible by air with direct flights from Miami, Madrid (Spain), Panama City, and one stop connection from most places in the Americas and Europe. Its central location is expected to optimize the number of participants from Central America and Caribbean countries traditionally under represented at scientific meetings.

International scientific committee:

Luis Caffarelli (University of Texas at Austin)
Alfonso Castro (Harvey Mudd College)
Chow, Shui-Nee (Georgia Institute of Technology)
María Esteban (Université de Paris, France)
Gilberto Flores (UNAM, Mexico)
Nassif Ghoussoub (PIMS, Canada)
Raúl Manasevich (Universidad de Chile)
Konstantin Mischaikow (Georgia Institute of Technology)
Hildebrando Munhoz (Universidade de São Paulo, Brazil)
James Muldowney (University of Alberta, Canada)
Gustavo Ponce (University of California at Santa Barbara)
Bernhard Ruf (Università degli Studi di Milano, Italy)
Gunther Uhlmann (University of Washington)
Yingfei Yi (Georgia Institute of Technology)
Noemi Wolanski (Universidad de Buenos Aires, Argentina)

Local organizing committee

Jorge Cossio, (Universidad Nacional de Colombia, Medellín)
Jaime Arango, (Universidad del Valle)
Jose F. Caicedo, (Universidad Nacional de Colombia, Bogotá)

Rafael Galeano, (Universidad de Cartagena)

Jairo Hernández, (Universidad del Norte)

Jaime Lesmes, (Universidad de los Andes)

Jorge Mejia, (Universidad Nacional de Colombia, Medellín)

Raúl Quintero, (Universidad del Valle)

Marlio Paredes, (Universidad Industrial de Santander)

Leonardo Rendon, (Universidad Nacional de Colombia, Bogotá)

Guillermo Rodríguez, (Universidad Nacional de Colombia, Bogotá)

Mario Zuluaga, (Universidad Nacional de Colombia, Bogotá)

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