

EMS Meeting of Presidents 2019

March 23-24
Berlin, Germany



SeMA

Spanish Society
of Applied
Mathematics

ICIAM



ICIAM
2019
VALENCIA

International
Congress on
Industrial and
Applied
Mathematics

July 15-19
Valencia · Spain

OUTLINE



1. ICIAM 2019 Valencia

2. Scientific Program

- Highlighted speakers
- Minisymposia, Contributed Papers, Posters
- Sub-Venues
- Embedded and Satellite Meetings

3. Proposed talks by country

4. Financial Aid Program

5. Conference venue

1. ICIAM 2019 Valencia

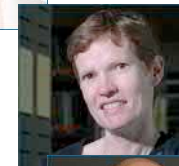
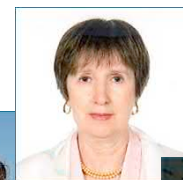
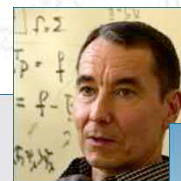
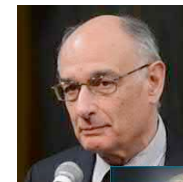
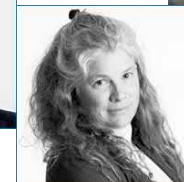
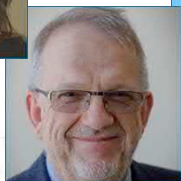


- ✓ Showcase for the most recent advances in **industrial** and **applied mathematics** **interdisciplinary** topics relating mathematics
- ✓ Demonstrate the **applicability of Mathematics** to science, engineering and industry
- ✓ Great opportunity for **young researchers** and **graduate students** to discover the vast potential of applied mathematics
- ✓ Expected: Nearly **4 000 delegates**

2. Scientific Program

Highlighted speakers

- ✓ Invited speakers: 27
- ✓ ICIAM Prizes
- ✓ Olga Taussky-Todd Lecture
- ✓ Outreach & Public Speakers



2. Scientific Program: Invited Speakers



Invited speakers

- | | |
|------------------------------------|--------------------------------|
| Marsha J. Berger (USA) | Claude Le Bris (France) |
| Alfredo Bermúdez de Castro (Spain) | Ruo Li (China) |
| Peter Bühlmann (Switzerland) | Sylvia Serfaty (USA) |
| Carlos Conca (Chile) | James Sethian (USA) |
| Wolfgang Dahmen (USA) | Panagiotis E. Souganidis (USA) |
| Hans De Sterck (Australia) | Hiroshi Suito (Japan) |
| Leah Edelstein-Keshet (Canada) | Eitan Tadmor (USA) |
| Isabelle Gallagher (France) | Anna-Karin Tornberg (Sweden) |
| Omar Ghattas (USA) | Marcelo Viana (Brazil) |
| Donald Goldfarb (USA) | Xiao-Ping Wang (China) |
| Thomas A. Grandine (USA) | J.A.C. Weideman (South Africa) |
| Nicholas J. Higham (UK) | Karen Willcox (USA) |
| Yunqing Huang (China) | Laura Winter (Singapore) |
| Kristin Lauter (USA) | |

2. Scientific Program: Highlighted speakers



Highlighted Speakers

- **ICIAM Prizes**
 - **Collatz Price: Siddharta Mishra**
 - **Lagrange Price: George Papanicolaou**
 - **Maxwell Price: Claude Bardos**
 - **Pioneer Price: Yvon Maday**
 - **Su Buchin: Giulia di Nunno**
- **Olga Taussky-Todd Lecture: Françoise Marie Louise Tisseur**
- **Public Lecture: Víctor M. Pérez García.**

2. Scientific Program: Proposed talks



- **Minisymposia topics (795 proposals, 3180 talks)**
 - ✓ Applied Mathematics for Industry and Engineering
 - ✓ Astronomy, Astrophysics and Geophysics
 - ✓ Biology, Medicine and other natural sciences
 - ✓ Chemistry, Chemical Engineering
 - ✓ Computational Geometry
 - ✓ Computer Science
 - ✓ Control and Systems Theory
 - ✓ Discrete Mathematics
 - ✓ Dynamical Systems and Nonlinear Analysis
 - ✓ Education
 - ✓ Finance and Management Science
 - ✓ Fluids Physics and Statistical Mechanics
 - ✓ Information, Communication, Signals
 - ✓ Linear Algebra and Geometry
 - ✓ Materials Science and Solid Mechanics
 - ✓ Mathematics and Computer Science
 - ✓ Numerical Analysis
 - ✓ Optimization and Operations Research
 - ✓ Ordinary Differential Equations
 - ✓ Partial Differential Equations
 - ✓ Probability and Statistics
 - ✓ Real and Complex Analysis
 - ✓ Simulation and Modelling
 - ✓ Social Science
 - ✓ Other Mathematical Topics and their Applications
- **Contributed Papers (890 proposals)**
- **Posters (178, up to date)**

2. Scientific Program: Sub-venues



Galicia

Bilbao

Zaragoza



Valencia



Sevilla

Málaga

2. Scientific Program: Satellite Meetings organized by sub-venues



BILBAO

- **Workshop on Quantitative Biomedicine for Health and Disease,**
February 13-14, **2019.**
- **150 European Study Group with Industry (ESGI).** October
21-25, 2019.



GALICIA

- **ICCF 2019 A Coruña (International Conference on Computational Finance),**
A Coruña, July 8-12 2019.
- **147 European Study Group with Industry (ESGI).**
April 8-12, 2019.
Santiago de Compostela.
- **I Conference on transfer Mathematics-Industry.**
July 22-24, 2019.
Santiago de Compostela.



2. Scientific Program: Satellite Meetings organized by sub-venues



MÁLAGA

- **NumHyp 2019, Numerical Approximation of Hyperbolic Systems with source terms and applications,**
June 17-21, 2019.

SEVILLA

- **Workshop on PDEs for biology systems.**
April 8-10, 2019
- **ECMI Post-Graduate 2019 / VI Iberian Modelling Week,**
July 7-12, 2019.



ZARAGOZA

- **Fifteenth International Conference Zaragoza-Pau on Mathematics and its Applications,**
September 10-12, 2018.

2. Scientific Program: Embedded and Satellite Meetings



- **30 Satellite Meetings.**
 - **2 CIMPA Schools (Kenitra, Tunisia).**
- **Embedded Meetings:**

- ✓  **Spanish Society of Applied Mathematics** **CEDYA/CMA Congress of Differential Equations and Applications/Congress of Applied Mathematics**
- ✓  **Society for Industrial and Applied Mathematics** **2019 SIAM Annual Meeting (AN19)**

3. Proposed talks by country



Country	N° of talks
Algeria	33
American Samoa	1
Argentina	26
Australia	35
Austria	82
Bangladesh	2
Belarus	1
Belgium	38
Bosnia And Herzegovina	1
Botswana	3
Brazil	44
Bulgaria	1
Cambodia	1
Cameroon	1
Canada	71
Chile	29
China	272
Christmas Island	1
Colombia	15
Croatia	9
Cuba	6
Cyprus	1
Czech Republic	14
Denmark	11

Dominican Republic	2
Ecuador	6
Egypt	5
Estonia	1
Ethiopia	1
Fiji	2
Finland	12
France	305
French Guiana	1
Gambia	1
Georgia	1
Germany	328
Greece	2
Guadeloupe	1
Honduras	2
Hong Kong	30
Hungary	11
India	316
Indonesia	7
Iran	8
Ireland	10
Israel	22
Italy	208
Jamaica	2
Japan	155

3. Proposed talks by country



Kazakhstan	3
Korea (South, Republic Of)	52
Kuwait	2
Latvia	2
Lebanon	2
Liberia	1
Lithuania	1
Luxembourg	3
Macao	2
Malaysia	10
Mexico	27
Morocco	36
Nepal	5
Netherlands	24
New Zealand	9
Niger	1
Nigeria	30
Norway	22
Oman	3
Pakistan	16
Palestine	1
Peru	4
Philippines	8
Poland	26
Portugal	38
Qatar	1
Romania	11
Russian Federation	28

Saudi Arabia	16
Senegal	3
Serbia	13
Singapore	27
Slovakia	7
Slovenia	1
South Africa	15
Spain	366
Sri Lanka	2
Swaziland	2
Sweden	29
Switzerland	51
Taiwan	17
Thailand	2
Tunisia	15
Turkey	13
Uganda	2
Ukraine	10
United Arab Emirates	2
United Kingdom	260
United States	876
Uruguay	1
Venezuela	7
Viet Nam	4
Zambia	1
Zimbabwe	1

4. Financial Aid Program



- **250 scholarships**
 - **Banco Santander:** 150 (close, medium, long range).
 - **P2B Program :** 80 (close range).
 - Crowdfunding, Spanish research centers.
 - **ICIAM:** 13 (medium, long range).
 - **Donors:** 7 (medium, long range).
- **774 applications**
 - **Evaluation in progress.**
- **Volunteer Program.**
 - **150 Volunteers.**
 - Funded by Autonomous Region and Province of Valencia, and sub-venues.

5. Conference Venue: Valencia



For keeping you updated:

- ✓ www.ICIAM2019.com
- ✓ Sign-up for e-alerts



- ✓ Follow us at @ICIAM2019

$\|\cdot\|$ is continuous
suppose that for some $z \in M$, $\|y - z\| = \delta$

$$\begin{aligned} \|y - x\|^2 &= \|(y - x) + (x - z)\|^2 \\ &= 2(\|y - x\|^2 + \|x - z\|^2) - \|y + z\|^2 \\ &= 4\delta^2 - 4\left\|\frac{y + z}{2} - x\right\|^2 \\ &\leq 4\delta^2 - 4\delta^2 = 0. \end{aligned}$$

Suppose $(H, (\cdot, \cdot))$ is an IPS and M is a subspace. If $x \in H$ is the orthogonal approximation to x in M , then $x - y \perp M$.

$\lambda, m \neq 0$. For any $\lambda \in \mathbb{F}$, by being orthogonal to m , we have $\langle x - y + \lambda m, m \rangle = 0$. Thus $\langle x - y, m \rangle + \lambda \|m\|^2 = 0$. Since λ is arbitrary, $\langle x - y, m \rangle = 0$.

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3.9. Suppose M is a subspace and $M \cap M^\perp$ is either $\{0\}$ or M .



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