



## 10th ISAAC congress in Macau in summer 2015

**The congress takes place August 8. Please spread community.**



**in Macau 2015 August 2 to this information within your**

Dear ISAAC members,

Dear All,

I am happy to invite you to attend the next ISAAC International Congress in Macau, 2-8 August 2015.

Participants are welcome to contribute to the Special Sessions, devoted to recent results in specific fields of interest. As in the preceding ISAAC meetings, the Special Sessions will give the opportunity to meet colleagues, to continue or start international collaborations.

Your participation and your own scientific contribution will be essential for the success of the Congress!

I look forward to meet you, and wish you a pleasant stay in Macau.

Yours,

Luigi Rodino,

ISAAC president



### Organizing Committee:

- Jun Long Chen, Honorary Co-Chair of Local Organizing Committee (University of Macau)
- Yang Chen (University of Macau)
- Pei Dang (Secretary) (Macao University of Science and Technology)
- Jin-Yuan Du (Wuhan University)
- Kit Ian Kou (Secretary) (University of Macau)
- Tao Qian, Chair of Local Organizing Committee (University of Macau)

### Plenary Speakers:

- Prof. Darren Crowdy, Imperial College London, [d.crowdy@imperial.ac.uk](mailto:d.crowdy@imperial.ac.uk)
- Prof. Alan McIntosh, Australian National University, Canberra [Alan.McIntosh@anu.edu.au](mailto:Alan.McIntosh@anu.edu.au)
- Prof. Ngaiming Mok, The University of Hong Kong, [nmok@hku.hk](mailto:nmok@hku.hk)
- Prof. Yoshinori Morimoto, Kyoto University, Japan, [morimoto@math.h.kyoto-u.ac.jp](mailto:morimoto@math.h.kyoto-u.ac.jp)
- Prof. Zhong-Shan Ou-Yang, ITP, CAS, China, [oy@itp.ac.cn](mailto:oy@itp.ac.cn)





- Prof. Saburo Saitoh, University of Aveiro, Portugal, [saburo.saitoh@gmail.com](mailto:saburo.saitoh@gmail.com)
- Prof. Winfried Sickel, University of Jena, Germany, [winfried.sickel@uni-jena.de](mailto:winfried.sickel@uni-jena.de)
- Prof. Dan Virgil Voiculescu, University of California, [dvv@math.berkeley.edu](mailto:dvv@math.berkeley.edu)
- Prof. Ya-Guang Wang, Shanghai Jiaotong University, [ygwang@sjtu.edu.cn](mailto:ygwang@sjtu.edu.cn)
- Prof. Karen Yagdjian, University of Texas-Pan American, [yagdjian@utpa.edu](mailto:yagdjian@utpa.edu)
- Prof. Nguyen Dong Yen, Vietnam Academy of Science and Technology, Hanoi, [ndyen@math.ac.vn](mailto:ndyen@math.ac.vn)
- Prof. Zhou Xiang-Yu, Chinese Academy of Sciences, Beijing, China, [xyzhou@math.ac.cn](mailto:xyzhou@math.ac.cn)

For more information (session, awards, accommodation, transportation, campus information) see:

<http://www.fst.umac.mo/conference/isaac2015/>

### In Memoriam Prof. Mircea Dimitrie Cazacu 10/10/1928 – 20/12/2014

Professor Mircea Dimitrie Cazacu passed away on 20.12.2014. He was born on 10.10.1928 in Chişinău, now the capital of Republic Moldova and on that time the second largest town of Romania.

He was professor at the Polytechnic Institute from Bucharest, Chair of Hydraulic and Hydraulic Machines, main researcher of the Romanian Academy, member of the Romanian Institute of Mathematics, Dept. of Fluid Mechanics from 1973, member of Gesellschaft für Angewandte Mathematik und Mechanik – GAMM from 1974, member of ISAAC from 2013.

He realized at the Polytechnic Institute from Bucharest three laboratories: the laboratory for the study of viscous fluid flows, the laboratory for hydraulic and pneumatic machines and the laboratory for new technologies of energy converse and magneto-hydrodynamics. In the last 20 years he studied new technologies and ecologic technologies.

He wrote more than 200 research papers, had 12 applied patents and a lot of innovations and made 34 technical expertise in Romanian industry (for example at the nuclear power station from Cernavodă).

He activated in 27 research directions and we mention just 4 of them, where deep mathematical methods are applied, especially numerical integration of partial differential equations and complex analysis:

1. The complex similarity method, applied for pumping station of nuclear power station in Cernavodă in 1977.
2. Flow visualization of the liquid free surface, numerical integration and stability of Navier-Stokes nonlinear PDE.
3. The mathematical model of plasma flow in the magnetic field of an electric generator.
4. The mathematical model of plasma-bidimensional flow in magneto-hydrodynamic generator of disc type.

For 60 years he also was first violinist in the Engineering Orchestra from Bucharest.

He was married with professor Cabiria Andreian Cazacu, honorary member of the Romanian Academy, a distinguished Romanian mathematician.

We shall always remember Professor Cazacu as an engineer with great mathematical skills, who regarded mathematics as a natural instrument for immediate technical applications and developed mathematical models in several directions of fluid mechanics (Mihai Cristea, University of Bucharest).





**Scientific report on the workshop  
"Complex Analysis and Dynamical Systems VII"  
Nahariya, Israel, May 10-15, 2015**

The conference was organized by Bar-Ilan University, ORT Braude College and University of South Florida. Over 100 scientists from about 20 countries participated the conference. The main themes were different areas of mathematical analysis, including complex analysis, dynamical systems, geometric function theory, Hamiltonian dynamics, partial differential equations, harmonic analysis, general relativity and Einstein equations. There were 12 plenary talks and three sessions: PDE (organized by M. Reissig and L.Karp), Geometry, and Complex Analysis.



Participants of the Conference CADS VII in Nahariya

**Plenary Speakers:**

Augustin Banyaga, Pennsylvania State University  
Haim Brezis, Technion - Israel Institute of Technology & Rutgers University  
Filippo Bracci, Roma University  
Gui-Qiang Chen, Oxford University  
Michael Entov, Technion - Israel Institute of Technology  
Alex Iosevich, University of Rochester  
Gady Kozma, Weizmann institute  
Peter Kuchment, Texas A&M University  
Svitlana Mayboroda, Minnesota University  
Vladimir Mazya, Lindköping University  
Mikhail Sodin, Tel-Aviv University  
Eitan Tadmor, University of Maryland

**Scientific Committee:**

M. Agranovsky, Bar-Ilan University, M. Ben-Artzi, Hebrew University, C. Bénéteau, University of South Florida, L. Karp, ORT Braude College, D. Khavinson, University of South Florida, S. Reich, Technion-Israel Institute of Technology, D. Shoikhet, ORT Braude College, G. Weinstein, Ariel University, L. Zalcman, Bar-Ilan University.





### Supported by:

The Hebrew University, The Emmy Noether Mathematical Institute of Bar-Ilan University  
The Galilee Research Center for Applied Mathematics of ORT Braude College, The Gelbart  
Research Institute for Mathematical Sciences of Bar-Ilan University, ISAAC, NSF US  
National Science Foundation.

## A VISIT OF UNIVERSITY OF VÄXJÖ IN THE SOUTH OF SWEDEN

Prof. Michael Reissig, vice-president of ISAAC visited the University of Växjö during the period April 20<sup>th</sup> up to 24<sup>th</sup>. He was invited by Prof. Joachim Toft, board member of our society. The main purpose of the visit was to give lectures about “Damped wave models” for Master- and PhD students and to discuss the joint supervision of one PhD student from University of Freiberg. Moreover, we discussed the matter of the 11<sup>th</sup> ISAAC congress in 2017. Prof. Toft introduced to me his university, lecture halls, lecture rooms, and other facilities as university restaurants. I was impressed of all opportunities. I strongly recommend the new board to support Prof. Toft’s application to organize the 11<sup>th</sup> ISAAC congress in Växjö in 2017. I asked Joachim Toft to provide some more information in detail (Michael Reissig, University of Freiberg, vice-president of ISAAC).

### Some information:

Here follows some facts about the city Växjö, and the Linnæus university campus in Växjö in Sweden. The information is especially selected as background concerning the ideas of letting an ISAAC congress be located at the university.

1. The congress should take place during the first or second week in August 2017.
2. The university campus is well concentrated. The plenary talks should take place at the IKEA room which has 400 seats. If this is insufficient, then one can make video transmission to other rooms. The room is at most 150 meter from the other rooms, aimed for the sessions. If the participants on the plenary talks are at most 200 persons, then one can go to Linnésalen which has 200 seats.
3. There are several seminar rooms located close to each other and which has around 45 seats each. These rooms are suitable for the session seminars. All rooms have equipment like computers, projectors and overhead projectors.
4. Not far from the seminars (around 100-150m), the main restaurant is located. It is sufficiently large for an ISAAC congress. There are also other restaurants and bars on the campus.
5. It is anticipated that all administrative assistance will be provided for a congress.
6. Concerning lodging: There are enough with hotels and other places for lodging in Växjö, for an event as an ISAAC congress. At the moment, the price for single rooms at the room is between 65-120€ per night. Perhaps some discounts can be arranged. Almost all hotels are at the city center, which is around 3-4 km from the campus. There are also some cheaper places for lodging, e.g. hostels. The prices here are around 30€ per night. Perhaps it is possible to find cheaper places. It might be possible to get discounts, taking into account of the event.





7. There are several bus lines between the city center and the campus, and it takes around 10 minutes when traveling from the center to the campus with busses.
8. The staff on central level at the university are enthusiastic of the idea of having an ISAAC congress at the campus. For example our "rektor" (the dean of the university) and "dekan" (the dean of our faculty) informed that they will support such kind of meeting financially and administratively.
9. In Sweden, there is a research founding institute, called Vetenskapsrådet (Swedish science council). In the case that it is decided that the next ISAAC congress will take place at Växjö, then we (the local organizers) will apply for futher financial supports from the council. It is anticipated that the council should support such activity. When I organized a meeting some years ago with 70 persons, the council supported the meeting with around 10000€.

## Some Photos



The main building from the right.



The main building at the main entrance



Linnésalen with 200 seats



A part of the hall of the main building.





A usual lecture room (with room for 40 persons)



The IKEA room, with 400 seats.

## ISAAC BOARD SUPPORTED THE FOLLOWING CONFERENCES WITHIN THE PERIOD 2013-2015

- Days of Analysis in Novi Sad,  
03.-07.07., 2014, Novi Sad, Serbia
- Complex and Harmonic Analysis,  
11.-13.06., 2014, Holon, Israel
- Recent Trends in Mathematical  
Analysis and its Applications,  
21.-23.12., 2014, IIT Roorkee,  
Roorkee, India
- 2nd Intern. Conf. on Math., Comp.  
(ICMC 2015), 05.-10. 01., 2015,  
Haldia Inst. Techn., India
- 23.01. 2015 Complex Analysis and Dynamical  
Systems VII, 10.-15.05., 2015,  
Nahariya, Israel

### We introduce new members of ISAAC:

**Leon Cohen** is a Professor of Physics and Astronomy at Hunter College and Graduate Center of the City University of New York. He obtained his Ph.D. from Yale University in 1966 under the supervision of Henry Margenau with a dissertation consisting of Part I: Transformation of Operators and Part II: Generalized Phase Space and Distribution of Functions. His seminal works are in the Wigner transforms and pseudo-differential operators in the context of quantum theory and time-frequency analysis. He publishes widely in journals in Mathematica Physics and the IEEE journals. His beautiful book "Time-Frequency Analysis" published in 1995 by Prentice Hall is now a classic and is a must-read for people working in signal processing.

His more recent book "The Weyl Operator and its Generalization" published in M. W. Wong's Birkhäuser series "Pseudo-Differential Operators: Theory and Application" is destined to become another classic in pseudo-differential operators (M.W. Wong, York University, Toronto)





**Musahan Muratbekov** (life member), Taraz State Pedagogical Institute, Taraz, Kazakhstan

**Kordan Ospanov** (life member), L.N. Gumilyov Eurasian National University, Astana, Kazakhstan

**Matteo Dalla Riva** (paid member), University Aveiro, Aveiro, Portugal

## Coming Conferences



### Mini-courses in Mathematical Analysis 2015

We announce that the **Mini-courses in Mathematical Analysis 2015** will be held at the [Dipartimento di Matematica](#) and at the [Dipartimento di Ingegneria Civile, Edile ed Ambientale](#) of the [University of Padova](#) from **June 22** to **June 26**. The program consists of four courses and a limited number of short communications. The courses are the following:

- **On the inf-sup constant of the divergence**  
by *Prof. Martin Costabel*  
Université de Rennes 1, France.
- **Geometric properties of elliptic and parabolic PDE's: time-invariant level surfaces and critical points**  
by *Prof. Rolando Magnanini*  
Università di Firenze, Italy.
- **On optimal Hardy inequalities for second-order elliptic operators**  
by *Prof. Yehuda Pinchover*  
Technion - Israel Institute of Technology, Haifa, Israel.
- **The vorticity and aggregation equations, and singular integrals**  
by *Prof. Joan Verdera*  
Universitat Autònoma de Barcelona, Spain.

Each course will take place in room LuF1, located in Via Luzzatti n. 8, Padova, Italy ([see map](#)), starting at 9.00 a.m. on Monday June 22.

The meeting aims at introducing the participants to important current research fields in Mathematical Analysis. The meeting is particularly indicated not only to graduate students, postdocs and young researchers but also to well-established experts in Mathematical Analysis.





We acknowledge the support of:

- [GNAMPA](#), Gruppo Nazionale per l'Analisi Matematica, la Probabilità e le loro Applicazioni
- [Dipartimento di Matematica](#), Univ. Padova
- [Dipartimento di Ingegneria Civile, Edile ed Ambientale](#), Univ. Padova
- Progetto di Ateneo "Singular perturbation problems for differential operators", Univ. Padova

In association with [ISAAC - International Society for Analysis, its Applications and Computation](#)

Organizers:

- Victor I. Burenkov
- Paolo Ciatti
- Pier Domenico Lamberti
- Massimo Lanza de Cristoforis

with the assistance of Matteo Dalla Riva and Paolo Musolino.

Participants should register by filling the [registration form](#) (note that we do not send a confirmation message.)

People interested in delivering a short talk (25 min) should send an abstract to [lamberti@math.unipd.it](mailto:lamberti@math.unipd.it) (Deadline: May 31)

Blackboard, overhead and data projector will be available for the presentations.

Information:

- Massimo Lanza de Cristoforis, e-mail: [mldc@math.unipd.it](mailto:mldc@math.unipd.it)

For a list of hotels and B&B: <http://www.turismopadova.it>

[Abstracts and notes](#) [Poster](#)

[Last editions](#)

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Immediately after the Macau ISAAC Congress, a minisymposium entitled "Pseudo-Differential Operators in Industries and Technologies", organized by M. W. Wong, will be held at the Beijing ICIAM 2015 on August 10-14, 2015. <http://www.iciam2015.cn>

An International Conference on Analysis, Applications and Computations: In Memory of Lee Lorch, will be held at the Fields Institute for Research in Mathematical Sciences in Toronto, Canada on September 28-30, 2015. Lee Lorch was an honorary member of ISAAC. M. W. Wong is Chair of the Organizing Committee.

<http://www.fields.utoronto.ca/programs/scientific/15-16/analysisapplications>

