

NEWSLETTER



President's Address
From the Office of the Secretary-General
IUTAM Symposia 2021, 2022 and 2023
IUTAM Special Event 2021
IUTAM Summer Schools 2022
IUTAM Endorsed Events 2021 and 2022
International Congress, XXV ICTAM, Milan 2021

IUTAM Home Page:

https://www.iutam.org or https://www.iutam.net

President's Address

As the incoming President of IUTAM, I begin by wishing you and your family good health in this difficult period of covid pandemic. The past year has been challenging for all of us, as new ways of working have had to emerge. But thankfully, international communication has continued via emerging technologies. I recognise that meeting in the virtual world is not the same as meeting in-person, but hope that global vaccination will progress quickly and allow us to get back together again in the 3D world of physical reality. In my mind, there is no denying the fact that seeing our colleagues in-person is optimal, and I look forward to normality returning hopefully in the near-term. Despite these difficulties, solid and fluid mechanics continue to thrive, both as stand-alone, fundamental subjects and as the essential elements of many important, inter-disciplinary problems. Global challenges such as climate change and the invention of a sustainable infrastructure demand new mechanics; for example, the design, use and recycling of electric vehicles require our insights for success.

I want to begin by expressing my personal gratitude to Nadine Aubry (USA), the outgoing President; Peter Eberhard (Germany), the outgoing Treasurer; Viggo Tvergaard (Denmark), the outgoing vice-president; Bernhard Schrefler (Italy) the outgoing member of the Bureau; and to Bob McMeeking (USA), the outgoing Secretary of the Congress Committee (CC). Each of them have given freely their time and energies for the smooth running of IUTAM activities. At the August 2020 GA we elected and welcomed Dan Henningson (Sweden) as Treasurer; Detlef Lohse (The Netherlands), Kikuo Kishimoto (Japan) as incoming Bureau members; and Sanjay Mittal (India) as the incoming Secretary of the Congress Committee (CC).

I am much impressed by the resilience of IUTAM in the face of a global shutdown of travel. International seminar series have emerged as the norm, and ICTAM2020 has now evolved into ICTAM2020+1. President Alberto Corigliano and his colleagues are doing an excellent job in hosting this event, and we look forward to a highly successful congress. Having now had a year of practice in remote on-line meetings, it is fully anticipated that the IUTAM community will be able to participate in ICTAM2020+1 in a meaningful and useful manner. For up to the minute information, see https://www.ictam2020.org/. A more limited number of IUTAM Symposia

are also running in 2021. Several Symposia chairs have also decided to postpone Symposia until 2022 where delegates can meet in-person. I expect that there will be a flurry of excitement in our return to such in-person Symposia.

IUTAM has also been busy on the organisational front. The General Assembly (GA) had a successful online meeting on 25th and 26 August 2020. The GA decided to set up a Diversity Working Group and will receive its report at the next on-line GA as part of ICTAM2020+1. This group has worked hard and we are grateful to them, with Pilar Ariza (Spain) as chair and Djimedo Kondo (France) as secretary. Behind the scenes, the Bureau has been putting in time and energy into the registration process for IUTAM, so that IUTAM can be properly registered as a legal entity. This is needed in order to ensure that IUTAM continues to thrive as a global organisation to promote the interests of the mechanics community.

I end my address with an invitation to my mechanics colleagues as we move beyond this covid pandemic: if there are new ways that IUTAM can better function to serve the international mechanics community, please do write to me and to other serving members of the Bureau or General Assembly. We welcome any new ideas and initiatives for the continued success of IUTAM.

10 May 2020

Norman Fleck President of IUTAM Cambridge University, UK

From the Office of the Secretary-General

IUTAM Report 2020

The IUTAM Report 2020 is now available online:

https://iutam.org/wp-content/uploads/2021/05/Annual-Report-2020.pdf.

Printed versions are freely available upon request.

Postponement and change of format of IUTAM events due to COVID-19

As the COVID-19 pandemic continues, the IUTAM activities in 2021 keep being affected by the uncertain worldwide situation. The 25th International Congress of Theoretical and Applied Mechanics, postponed to 22-27 August 2021 and renamed ICTAM 2020+1, will be held in a fully virtual format. Detailed information can be found on the Congress website. No IUTAM Symposia or Summer Schools took place in 2020. One of those Symposia was cancelled, while seven others, the IUTAM-CISM Summer School and the IUTAM Special Event were postponed by their Chairs and local organizers to 2021 or 2022. In the time of the pandemic, organizers are free to choose an in-person, hybrid or fully virtual format for their Symposia. New dates and format, if available, are announced in the present IUTAM Newsletter. Please consult the IUTAM website for up-to-date information about all IUTAM events.

Symposia proceedings

Since 2018, if the organizers of an IUTAM Symposium decide to publish proceedings, the recommended form of publication is the <u>IUTAM Bookseries</u> by Springer. This is an opportunity to leave a published legacy of a meeting, regardless of whether it is an in-person or a virtual event due to the pandemic. Six volumes (nos. 33–38) of the Series have already been published since 2018. One further volume has been contracted.

Registration of IUTAM

The office of the Secretary-General and the Bureau of IUTAM continued their work on the registration of IUTAM in the Netherlands. To assure

compliance with the Dutch law, IUTAM's Statutes have been reviewed and several new clauses formulated, which are currently being consulted with Dutch lawyers.

Meeting of the IUTAM General Assembly in 2021

The General Assembly will have a virtual meeting by electronic means on Sunday, August 22, and on Wednesday, August 25, 2021 at ICTAM 2020+1.

Call for proposals for IUTAM Symposia and Summer Schools 2024-2025

The call for the next wave of IUTAM Symposia and Summer Schools will open online at the end of 2021. The deadline for submissions will be 31 March 2022.

June 2021

Henryk Petryk Secretary-General of IUTAM Warsaw, Poland

IUTAM Symposia 2021

Due to the ongoing COVID-19 pandemic, the dates and venues of IUTAM Symposia may change. Please consult the IUTAM website for up-to-date information about all IUTAM events.

21-1 = GA.18-10 IUTAM Symposium on Mechanics of smart and tough gels

Austin, USA – online event May 24 – May 29, 2021

Co-Chair: **Prof. R. Huang**

Place:

Date:

University of Texas at Austin 210 E 24th Street, C0600 78712-1221 Austin, USA

Email: ruihuang@mail.utexas.edu

Co-Chair: **Prof. X. Zhao**

Massachusetts Institute of Technology

Boston, USA

Email: <u>zhaox@mit.edu</u>

Website: https://sites.utexas.edu/iutam2021

IUTAM Representative on Scientific Committee: Prof. N.A. Fleck

21-2 = GA.18-06 IUTAM Symposium on Computational methods for

large-scale and complex wave problems

Place: Tokyo, Japan – online event

Date: June 25 – June 26 and July 2 – July 3, 2021

Chair: Prof. K. Kishimoto

Tokyo Institute of Technology 2-12-1 Oookayama, Meguro 152-8552 Tokyo, Japan

Email: kkishimoto@ocean.zaq.jp

Website: http://www.solidmech.mech.e.titech.ac.jp/IUTAM2021/

IUTAM Representative on Scientific Committee: Prof. N. Aubry

21-3 = GA.18-11 IUTAM Symposium on Turbulent structure and

particles-turbulence interaction

Place: Lanzhou, China
Date: July 2 – July 5, 2021
Co-Chair: **Prof. X.J. Zheng**Xidian University

710126 Xi'an, Shaanxi, China Email: xjzheng@xidian.edu.cn

Co-Chair: **Prof. S. Balachandar**

University of Florida

Department of Mechanical & Aerospace Engineering

231 MAE-A, P.O. Box 116250 Gainesville, FL 32611, USA Email: bala1s@ufl.edu

Website: http://www.iutamlzu.com/

IUTAM Representative on Scientific Committee: Prof. H.K. Moffatt

21-4 = GA.18-08 IUTAM Symposium on Generalized continua

emerging from microstructures

Place: Paris, France – hybrid event Date: July 19 – July 23, 2021

Chair: **Prof. S. Forest**

Mines ParisTech CNRS 60 Boulevard Saint-Michel 75006 Paris, France

Email: samuel.forest@mines-paristech.fr

Website: https://iutam-2021-gc.sciencesconf.org/

IUTAM Representative on Scientific Committee: Prof. N.A. Fleck

21-5 = GA.18-03 IUTAM Symposium on Dynamics and interface

phenomena of bubbles and droplets at multiple

scales

Place: Tokyo, Japan

Date: 2021, no exact dates available yet.

Chair: **Prof. S. Takagi**

The University of Tokyo 7-3-1, Hongo, Bunkyo-ku 113-8656 Tokyo, Japan

Email: takagi@mech.t.u-tokyo.ac.jp

IUTAM Representative on Scientific Committee: Prof. A.P.S. Freire

21-6 = GA.18-13 IUTAM Symposium on Optimal guidance and

control for autonomous systems

Place: Honolulu, USA

Date: 2021, no exact dates available yet.

Chair: **Prof. D. Azimov**

University of Hawai'i at Manoa 2540 Dole Street, Holmes 202

96822 Honolulu, USA Email: azimov@hawaii.edu

Website: https://manoa.hawaii.edu/ISOGCAS2020/

IUTAM Representative on Scientific Committee: Prof. P. Eberhard

21-7 = GA.18-14 IUTAM Symposium on Multiphysics analysis of wave propagation in electronic device structures

Place: Ningbo, China

Date: 2021, no exact dates available yet.

Chair: **Prof. J. Wang**

Ningbo University

School of Mechanical Engineering and Mechanics

818 Fenghua Road 315211 Ningbo, China Email: wangji@nbu.edu.cn

IUTAM Representative on Scientific Committee: Prof. H. Gao

21-8 = GA.18-15 IUTAM Symposium on Mechanics of liquid crystal elastomers

Place: Houston, USA

Date: 2021, no exact dates available yet.

Chair: **Prof. P. Sharma**

University of Houston

N207 Engineering Building 1 77204-4503 Houston, USA

Email: psharma@Central.UH.EDU

IUTAM Representative on Scientific Committee: Prof. B.A. Schrefler

IUTAM Special Event 2021

21-S = GA.18-04 Fluid mechanics in the spirit of G. K. Batchelor

Place: Cambridge, UK – online event Date: March 29 – March 31, 2021

Chair: **Prof. P.F. Linden**

University of Cambridge

DAMTP

Centre for Mathematical Sciences

Wilberforce Road

CB3 0WA Cambridge, UK Email: pfl4@cam.ac.uk

Website: http://www.damtp.cam.ac.uk/events/batchelorcentenary/

IUTAM Representative on Scientific Committee: Prof. T.J. Pedley

IUTAM Symposia 2022

22-1 = GA.20-08 IUTAM Symposium on Soft matter mechanics

Place: Hangzhou, China

Date: April 28 – April 30, 2022

Chair: **Prof. Y. Huang**

Northwestern University

Evanston, USA

Email: y-huang@northwestern.edu

IUTAM Representative on Scientific Committee: Prof. H. Gao

22-2 = GA.18-07 IUTAM Symposium on Ultralarge-scale topology

optimization

Place: Kongens Lyngby, Denmark
Date: May 15 – May 18, 2022

Chair: **Prof. O. Sigmund**

Technical University of Denmark Nils Koppels Allé, building 404 2800 Kongens Lyngby, Denmark Email: sigmund@mek.dtu.dk

Website: https://www.conferencemanager.dk/iutam2022

IUTAM Representative on Scientific Committee: Prof. V. Tvergaard

22-3 = GA.20-10 IUTAM Symposium on Enhancing material

performance by exploiting instabilities and damage

evolution

Place: Warsaw, Poland
Date: June 5 – June 10, 2022

Chair: Prof. K. Kowalczyk-Gajewska

Institute of Fundamental Technological Research

Polish Academy of Sciences

Pawinskiego 5B

02-106 Warsaw, Poland

Email: <u>kkowalcz@ippt.pan.pl</u>

Co-Chair: **Prof. A. Srivastava**

Texas A&M University College Station, USA Email: ankit.sri@tamu.edu

Website: http://iutam2022warsaw.ippt.pan.pl/

IUTAM Representative on Scientific Committee: Prof. H. Petryk

22-4 = GA.20-04 IUTAM Symposium on Data-driven nonlinear and

stochastic dynamics with the control

Place: Xi'an, China

Date: June 6 – June 10, 2022

Co-Chair: **Prof. Y. Xu**

Northwestern Polytechnical University School of Mathematics and Statistics

127 West Youyi Road

710072 Xi'an Shaanxi, China Email: hsux3@nwpu.edu.cn

Co-Chair: **Prof. J. Kurths**

Humboldt-University Berlin

Institute of Physics Berlin, Germany

Email: juergen.kurths@pik-potsdam.de

Website: http://www.iutam2022-xian.com

IUTAM Representative on Scientific Committee: Prof. G. Stépán

22-5 = GA.20-02 IUTAM Symposium on Data-driven modeling and optimization in fluid mechanics

Place: Aarhus, Denmark

Date: June 15 – June 17, 2022 Chair: **Prof. J.N. Sørensen**

Technical University of Denmark (DTU)

Lyngby, Denmark Email: jnso@dtu.dk

Co-Chair: **Prof. M. Abkar**

Aarhus University Aarhus C, Denmark Email: abkar@mpe.au.dk

IUTAM Representative on Scientific Committee: Prof. D. Henningson

22-6 = GA.20-07 IUTAM Symposium on Multiscale architecting of

microstructures of solids: mechanics and

manufacture

Place: Beijing, China

Date: June 26 – June 28, 2022

Chair: **Prof. Y. Wei**

Institute of Mechanics

Chinese Academy of Sciences

Bei Si Huan Xi Rd #15, Zhongguancun

100190 Beijing, China

Email: yujie_wei@lnm.imech.ac.cn

Website: http://iutam2022-mams-mm.csp.escience.cn/

IUTAM Representative on Scientific Committee: Prof. N.A. Fleck

22-7 = GA.18-02 IUTAM Symposium on Interface mechanics of complex flows and soft matter

Place: Beijing, China

Date: June 29 – July 2, 2022

Co-Chair: **Prof. H. Duan**

Peking University

Department of Mechanics and Engineering Science

No.5 Yiheyuan Road, Haidian District

100871 Beijing, China

Email: hlduan@pku.edu.cn

Co-Chair: **Prof. C. Sun**

Tsinghua University Beijing, China

Email: chaosun@tsinghua.edu.cn

Website: http://iutam2020.pku.edu.cn

IUTAM Representative on Scientific Committee: Prof. G. McKinley

22-8 = GA.20-13 IUTAM Symposium on Optimal design and control

 $of\ multibody\ systems-adjoint\ methods,\ alternatives,$

and beyond

Place: Hamburg, Germany
Date: July 18 – July 21, 2022

Chair: **Prof. A. Held**

Hamburg University of Technology (TUHH) Institute of Mechanics and Ocean Engineering

Eißendorfer Straße 42 21073 Hamburg, Germany Email: alexander.held@tuhh.de

Website: https://www.tuhh.de/alt/mum/iutam-symposium-

2022.html

IUTAM Representative on Scientific Committee: Prof. P. Eberhard

22-9 = GA.20-01 IUTAM Symposium "From Stokesian suspension dynamics to particulate flows in turbulence"

Place: Toulouse, France

Date: August 30 – September 2, 2022

Chair: **Prof. M. Maxey**

Brown University Providence, USA

Email: martin_maxey@brown.edu

IUTAM Representative on Scientific Committee: Prof. D. Lohse

22-10 = GA.20-03 IUTAM Symposium on Turbulent/non-turbulent interface in turbulent shear flow

Place: Beijing, China

Date: October 17 – October 19, 2022

Chair: **Prof. J. Wang**

Beihang University

Key Laboratory of Fluid Mechanics of Ministry of

Education of China

37 Xueyuan Road, Haidian District

100191 Beijing, China Email: jjwang@buaa.edu.cn

IUTAM Representative on Scientific Committee: Prof. A.P.S. Freire

22-11 = GA.18-12 IUTAM Symposium on Data-driven mechanics

Place: Paris, France

Date: October 26 – October 28, 2022

Chair: **Prof. F. Chinesta**

Arts et Metiers

151 Boulevard de l'Hopital

75013 Paris, France

Email: Francisco.Chinesta@ensam.eu

IUTAM Representative on Scientific Committee: Prof. N.A. Fleck

22-12 = GA.18-01 IUTAM Symposium on Particles, drops and bubbles in stratified environments

Place: Toulouse, France

Website:

Date: 2022, no exact dates available yet.

Chair: **Prof. J. Magnaudet**

CNRS & Toulouse University

Institut de Mécanique des Fluides de Toulouse

Allée Camille Soula 31400 Toulouse, France Email: magnau@imft.fr

https://iutam-imft-2020.sciencesconf.org/

IUTAM Representative on Scientific Committee: Prof. A.P.S. Freire

IUTAM Symposia 2023

23-1 = GA.20-12 IUTAM Symposium on Creep in structures

Place: Magdeburg, Germany

Date: September 18 – September 22, 2023

Chair: **Prof. H. Altenbach**

Otto-von-Guericke-Universitaet Magdeburg

Institute for Mechanics Universitaetsplatz 2

39106 Magdeburg, Germany Email: holm.altenbach@ovgu.de

IUTAM Representative on Scientific Committee: Prof. B.A. Schrefler

23-2 = GA.20-05 IUTAM Symposium on Dynamics of capsules,

vesicles and cells in flow

Place: Compiègne, France

Date: 2023, no exact dates available yet.

Chair: **Prof. A.-V. Salsac**

Université de Technologie de Compiègne Biomechanics and Bioengineering Laboratory

CS 60319

60203 Compiègne, France Email: a.salsac@utc.fr

IUTAM Representative on Scientific Committee: Prof. T.J. Pedley

23-3 = GA.20-06 IUTAM Symposium on Interfacial effects, gels and

cells

Place: Limerick, Ireland

Date: 2023, no exact dates available yet.

Chair: **Prof. J. Huyghe**

University of Limerick

Bernal Institute

AD3.020 Analog Devices building

Plassey Park Road IE Limerick, Ireland

Email: jacques.huyghe@ul.ie

IUTAM Representative on Scientific Committee: Prof. F. Dias

23-4 = GA.20-09 IUTAM Symposium on Mechanics of advanced

materials and structures with multifield couplings

Place: Nanjing, China

Date: 2023, no exact dates available yet.

Chair: **Prof. J.N. Reddy**

Texas A&M University Collegue Station, USA Email: jnreddy@tamu.edu

IUTAM Representative on Scientific Committee: Prof. I.G. Goryacheva

23-5 = GA.20-11 IUTAM Symposium on Nonlinear dynamics for

design of mechanical systems across different

length/time scales

Place: Tsukuba, Japan

Date: 2023, no exact dates available yet.

Chair: Prof. H. Yabuno

University of Tsukuba 1-1-1 Ten-no-dai

305-8573 Tsukuba, Japan

Email: yabuno@esys.tsukuba.ac.jp

IUTAM Representative on Scientific Committee: Prof. G. Rega

IUTAM Summer Schools 2022

2022 IUTAM-CISM Summer School on Instability and

bifurcation of solids including coupled field

phenomena

Place: Udine, Italy

Event dates: 2022, no exact dates available yet.

Coordinators: **Prof. R. Ogden**

University of Glasgow

School of Mathematics and Statistics

University Place

G12 8SQ Glasgow, UK

Email: Raymond.Ogden@glasgow.ac.uk

Prof. L. Dorfmann Tufts University

Department of Civil and Environmental Engineering

200 College Avenue

Medford, MA 02155, USA Email: Luis.Dorfmann@tufts.edu

Website: https://www.cism.it/en/activities/courses/C2109/

2022 IUTAM-CISM Summer School on Sports physics

and technology

Place: Udine, Italy

Event dates: 2022, no exact dates available yet.

Coordinators: **Prof. A. Hosoi**

Massachusetts Institute of Technology Department of Mechanical Engineering

77 Massachusetts Avenue

Massachusetts 02139, Cambridge, USA

Email: peko@MIT.EDU

Prof. C. Clanet

LadHyX, Ecole Polytechnique

Palaiseau, France

Email: clanet@ladhyx.polytechnique.fr

2022 IUTAM-CISM Summer School on Convection and

deformation in porous media: geophysical and

biological flows

Place: Udine, Italy

Event dates: 2022, no exact dates available yet.

Coordinators: **Prof. C. MacMinn**

University of Oxford

Department of Engineering Science

Parks Road

OX1 3PJ Oxford, UK

Email: christopher.macminn@eng.ox.ac.uk

Prof. M. De Paoli

TU Wien

Institute of Fluid Mechanics and Heat Transfer

Wien, Austria

Email: marco.de.paoli@tuwien.ac.at

IUTAM Endorsed Events 2021 and 2022

2021 1st BICTAM-CISM Symposium on Dispersed

Multiphase Flows: from Measuring to Modeling

Place: Online event

Date: March 2 – March 5, 2021

Co-Chair: **Prof. Jiachun Li**

Email: jcli05@imech.ac.cn

Co-Chair: Prof. Cristian Marchioli

Email: cristian.marchioli@uniud.it

Website: http://158.110.32.35/BICTAM-CISM

2021 International Symposium on Co-Simulation and Solver

Coupling in Dynamics

Place: Online event

Date: May 24 – May 25, 2021 Co-Chair: **Dr. Francisco J. González**

Email: f.gonzalez@udc.es

Co-Chair: **Prof. Javier Cuadrado**

Email: javier.cuadrado@udc.es

Website: http://lim.ii.udc.es/events/cosim2020

2021 InterPore2021 Conference

Place: Online event

Date: May 31 – June 4, 2021 Chair: **Prof. Oleg Iliev**

Email: oleg.iliev@itwm.fraunhofer.de

Website: https://www.interpore.org/2021

2021 1st IACM Conference on Mechanistic Machine Learning

and Digital Twins for Computational Science,

Engineering & Technology

Place: San Diego, California, USA

Date: September 26 – September 29, 2021

Co-Chair: **Prof. Wing Kam Liu**

Email: w-liu@northwestern.edu

Co-Chair: **Prof. J. S. Chen**

Email: js-chen@ucsd.edu

Co-Chair: **Prof. Charbel Farhat**

Email: cfarhat@stanford.edu

Co-Chair: **Prof. Francisco Chinesta**

Email: Francisco.Chinesta@ensam.eu

Co-Chair: **Prof. George Karniadakis**

Email: George Karniadakis@brown.edu

Co-Chair: **Prof. WaiChing Sun**

Email: wsun@columbia.edu

Website: https://sites.google.com/eng.ucsd.edu/iacm-mldt-cse

2022 International Conference on Nonlinear Solid Mechanics

Place: Alghero, Sardinia, Italy
Date: June 13 – June 16, 2022
Co-Chair: **Prof. Marco Amabili**

Email: marco.amabili@mcgill.ca

Co-Chair: Prof. Francesco dell'Isola

Email: francesco.dellisola.aquila@gmail.com

Website: http://www.memocsevents.eu/iconsom2022/

2022 1st International Conference on Mechanics for Global

Challenges

Place: Singapore

Date: June 19 – June 24, 2022 Chair: **Prof. Huajian Gao**

Email: huajian.gao@ntu.edu.sg

Website: https://icmgc.org/

2022 6th Joint International Conference on Multibody System

Dynamics and 10th Asian Conference on Multibody

Dynamics

Place: New Delhi, India

Date: October 16 – October 20, 2022 Chair: **Prof. Subir Kumar Saha**

Email: saha@mech.iitd.ac.in

Co-Chair: **Prof. Rama Krishna K**

Email: rkk@mech.iitd.ac.in

Website: http://imsdacmd2020.iitd.ac.in/

ANNOUNCEMENT from the Committee on Space Research (COSPAR), an affiliated body of the International Science Council (ISC):

2022 44th Scientific Assembly of the Committee on Space

Research (COSPAR) and Associated Events "COSPAR

2022"

Place: Athens, Greece

Date: July 16 – July 24, 2022 Contact: cospar@cosparhq.cnes.fr

https://www.cospar-assembly.org

Abstract Deadline: Mid-February 2022

Topics:

Approximately 140 meetings covering the fields of COSPAR Scientific Commissions (SC) and Panels – details available on the website https://www.cospar-assembly.org.

Selected papers published in Advances in Space Research and Life Sciences in Space Research, fully refereed journals with no deadlines open to all submissions in relevant fields.

XXV International Congress of Theoretical and Applied Mechanics 22-27 August 2021, virtual congress ICTAM 2020+1

The International Congresses of Theoretical and Applied Mechanics (ICTAM), organized every four years by IUTAM, bring together scientists from all over the world for the purpose of exchanging information about recent developments in the field. Participation is unrestricted.

Due to the COVID-19 pandemic, the Congress has been postponed by President Alberto Corigliano and his local organizing committee to 22-27 August 2021 and will be fully virtual. For current information see the ICTAM home page, https://www.ictam2020.org/.

Opening and Closing Lecturers

Opening Lecturer: Professor Nicola Pugno (Italy)

Closing Lecturer: Professor Elisabeth Guazzelli (France)

Sectional Lecturers

Bala Balachandran (USA)

Alessandro Bottaro (Italy)

Vikram Deshpande (UK)

Antonio De Simone (Italy)

Frederic Dias (Ireland)

Xi-Qiao Feng (China)

Genta Kawahara (Japan)

Ellen Kuhl (USA)

Eric Lauga (UK)

Jean-Baptiste Leblond (France)

Christian Niordson (Denmark)

Clarence Rowley (USA)

Miles Rubin (Israel)

Cameron Tropea (Germany)

Roberto Verzicco (Italy)

Emmanuel Villermaux (France)

Minisymposia

Modeling and Controlling Turbulent Shear Flows

Co-Chairs Professor Ivan Marusic (Australia)

Professor Beverley McKeon (USA)

Local Mechanics of Climate Processes

Co-Chairs Professor Eberhard Bodenschatz (Germany)

Professor John Wettlaufer (USA)

Biological Fluid-Structure Interaction at the Microscale

Co-Chairs Professor Prosenjit Bagchi (USA)

Professor Anne-Virginie Salsac (France)

Nonlinear Dynamics for Design

Co-Chairs Professor Remco Leine (Germany)

Professor Stefano Lenci (Italy)

Mechanics of Additive Manufacturing

Co-Chairs Professor Ferdinando Auricchio (Italy)

Professor Matthew Begley (USA)

Mechanics of C-Allotropic Materials and Structures

Co-Chairs Professor Julia Greer (USA)

Professor Roberto Paroni (Italy)

Thematic Sessions

Fluids Topics

FM01 Biological Fluid Mechanics

FM02 Boundary Layers

FM03 Combustion and Flames

FM04 Compressible Flows

FM05 Convection

FM06 Drops, Bubbles and Interfaces

FM07 Multiphase and Particle-Laden Flows

FM08 Flow Instability and Transition

FM09 Thin Film Flows

FM10 Geophysical and Environmental Fluid Dynamics

FM11 Low-Reynolds-Number Flows and Suspensions

FM12 Micro- and Nano-Fluidics

FM13 Non-Newtonian and Complex Fluids

FM14 Computational Fluid Dynamics

FM15 Turbulence

FM16 Vortex Dynamics

FM17 Waves in Fluids

FM18 Electro- and Magneto- Hydrodynamics

FM19 Other Topics in Fluid Mechanics

Solids Topics

SM01 Biomechanics and Biomaterials

SM02 Tribology - Contact and Friction

SM03 Damage Mechanics

SM04 Elasticity

SM05 Fracture Mechanics

SM06 Geophysics and Geomechanics

SM07 Impact Mechanics and Wave Propagation

SM08 Multi-component, Composite and Hierarchical Materials

SM09 Phase Transformations and Thermomechanical Phenomena

SM10 Sizescale Effects in Materials

SM11 Multibody and Vehicle Dynamics

SM12 Nanostructures and MEMS

SM13 Plasticity, Viscoplasticity and Creep

SM14 Stability and Instability of Materials and Structures

SM15 Computational Solid Mechanics

SM16 Vibrations and Control of Structures

SM17 Soft Materials and Extremely Deformable Structures

SM18 Metamaterials

SM19 Other Topics in Solid Mechanics

Solids/Fluids Topics

FS01 Acoustics

FS02 Exascale Computing

FS03 Experimental Methods in Mechanics

FS04 Nonlinear Dynamics and Pattern Formation

FS05 Porous Media

FS06 Fluid Structure Interactions

FS07 Smart Actuating Systems

FS08 Granular Materials and Flows

FS09 Foams and Cellular Materials

FS10 Optimization for Solids and Fluids

FS11 Inverse Problems in Solids and Fluids

FS12 Education in Mechanics

Notice on IUTAM Symposia

The IUTAM Symposia are reserved to invited participants. Those wishing to participate in an IUTAM Symposium are therefore advised to contact the Chairman of the Scientific Committee in due time in advance of the meeting.

As of January 2018, if the organizers of an IUTAM Symposium decide to publish proceedings, the recommended route of publication is the <u>IUTAM Bookseries</u> by Springer. Chairpersons of Symposia can contact the Secretary-General of IUTAM for the terms and conditions of publication in this series.

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