Announcement, AIFLUIDs 1rst International Conference, Chania, May 27-30 2025

On behalf of the Organising Committee, it is our great pleasure to announce the 1st International Symposium on 'AI and Fluid Mechanics', **AIFLUIDs**; see attached flyer; follow our website

www.aifluids.net

for updates.

Dates: 27-30th May 2025.

Venue: MAICh Conference Centre, on the island of Crete, Greece

AIFLUIDs aims to stand out as the premier global event dedicated to AI and data-driven methods applied to computational & experimental fluid mechanics. A number of plenary talks is already scheduled, please check

https://aifluids.net/speakers

AIFLUIDs is welcoming scientists, engineers and young researchers, as well as industries and corporations actively engaged to all relevant fields to participate to the event.

Registration and submission of abstracts/expression of interest will open on 15 September 2024.

We look forward to your participation,

On behalf of the AIFLUIDs organizing Committee

Kyriakos Giannakoglou, Professor NTUA

1st International Symposium
AI and Fluid Mechanics
27-30th May 2025

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Venue: The event will take place at the conference centre of the Mediterranean Agricultural Institute of Chania (MAICh).

Chania is a beautiful city in the island of Crete, Greece. A blend of cosmopolitan and historic past with Greek, Venetian and Turkish traditional architecture, extraordinary nearby beaches and ancient monuments, local cuisine and traditional music listed in UNESCO's cultural heritage, make Chania and Crete a popular destination throughout the year.

Submission deadlines & Registration

Expression of interest	15.12.2024
Extended abstract or full paper	15.02.2025
Notification of acceptance after peer-review	15.03.2025
Deadline for early bird registration	15.01.2025

Conference website and updates: www.aifluids.net

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Topics

- Reduced-order models and dimensionality reduction
- Image/data processing and feature detection
- Digital Twins and real time simulations
- Data-driven ML surrogate models
- Multidisciplinary Optimization
- Uncertainty Quantification
- Signal processing
- Turbulent flows
- Non-Newtonian fluids
- High speed aerodynamics
- Hydrodynamics and propulsion
- Multi-phase/multi-physics flows
- Flow Control and Reinforcement Learning
- Process engineering and equations of state
- AI-enhanced Computational Fluid Dynamics

Keynote Speakers

- Luca Biferale (University of Tor Vergata & INFN, Italy)
- George Karniadakis (Brown University, USA)
- Koji Fukagata (Keio University, Japan)
- Paris Perdikaris (Microsoft/University of Pennsylvania, USA)
- Sivaramakrishnan Balachandar (University of Florida, USA)
- Maurizio Quadrio (Politechnico di Milano, Italy)
- Petros Koumoutsakos (Harvard University, USA)
- Andrea Beck (Stuttgart University, Germany)
- Wang Yiwei (Institute of Mechanics, Chinese Academy of Sciences, China)
- Miguel Alonso Mendez (Von Karman Institute for Fluid Dynamics, Belgium)
- Heinz Pitsch (Aachen University, Germany)

Organisers

- Manolis Gavaises (City University London, UK & OVGU, DE)
- Miguel Mendez (Von Karman Institute for Fluid Dynamics, BE)
- Ricardo Vinuesa (KTH Royal Institute of Technology, SE)
- Sivaramakrishnan Balachandar (University of Florida, USA)
- Wang Yiwei (Institute of Mechanics, Chinese Academy of Sciences, CN)
- Kyriakos Giannakoglou (National Technical University Athens, GR)

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