DASIA 2024 - ANNOUNCE & CALL FOR PAPERS

The DASIA 2024 conference will be organized in at Hotel Ambasador Opatija (Croatia) from Tuesday May 28th to Thursday May 30th 2024.

About the DASIA conference

DASIA (DAta Systems in Aerospace) is an annual conference organised by Eurospace since 1996. It gathers every year >100 **space data systems specialists** over 3 days for presentations, workshops/panels and discussion. It provides opportunities for exhibitors and networking. DASIA is a well-established event in the space community.

DASIA participants are representatives of the whole space system supply chain (including RTOs, labs, universities and the private industry: SMEs, midcaps and large groups, from components and equipment suppliers to sub-system and system integrators) and those of the institutional sector, mostly ESA and national agencies. **They are mostly European, but wider international participation is welcome**.

The conference addresses technical and managerial aspects of the development, operation and maintenance of data-handling related components and systems. It covers software, system engineering, and related hardware aspects for space systems (and other systems sharing similar requirements for high reliability and complexity).

Call For Papers

Speakers are invited to announce their intention of submitting a paper as soon as possible and are invited to submit an abstract covering any topic, subtopic or neighbouring topic from the conference themes identified below **by February 10th, 2024**.

We want to encourage presentation of non-space related applications and associated technology with similar requirements for reliability and performance.

The selection of papers will take place at the latest in **March 2024** and the full Conference Program will be issued shortly after.

Authors will be requested to forward their full text – final paper at the latest by **July 1st 2024**. Final papers & presentations will be made available after the Conference to all registered participants.

Abstract Guidelines

- Abstracts shall be three to five pages - not less than three and not more than five.
- The top of the first page – for abstract and final paper - shall provide for the following:
  - Title
  - Authors' details: full name, company affiliation, phone & email
    - **Important:** Please also include at the top of the first page of the abstract, **the name of the person(s) who will perform the presentation**, the associated email and phone, as well as possible constraints linked to the presentation (e.g. pending rights of publishing).
- The preferred session for the paper (from 1 to 7 in the list below, use the session themes for the best selection). You can also indicate the topics covered by your paper using the two digit code within each session for more detail.

- Abstracts shall be submitted by e-mail in PDF-format **by February 10th, 2024 -** at the following address: **dasia@eurospace.org**.

Conference Themes

The conference will accept abstracts in the following thematic areas:

1. **Software (SW) and code**
   1.1. Software architectures and frameworks
   1.2. Software Verification and Validation
   1.3. Verification & Validation of Artificial Intelligence
   1.4. SW failure mode detection and SW quality assessment
   1.5. Code generation for high reliability systems
   1.6. Functional verification and related test benches (SVF)

2. **Digital Models, Tools & Simulation**
   2.1. Modelisation SW and end-to-end data architecture design
   2.2. Model Based Methodologies and SW engineering
   2.3. Digital twins
   2.4. Functional simulations and distributed simulators

3. **Data handling and processing for data-hungry/data-critical missions and applications**
   3.1. Data management aspects for remote sensing missions - on-board processing, AI, ML, cloud based processing, data storage...
   3.2. Data management for telecommunications missions - high performance switching, hi speed AD/DA conversion, high data rates, ...
   3.3. Data management for Global Navigation Satellite System (GNSS) and Position, Navigation & Timing (PNT) applications - Navigation, Automatic Identification System (AIS), Automated Dependent Surveillance-Broadcast (ADS-B), Internet of things (IoT)...
   3.4. Data handling & data management for multi-satellite and constellation missions

4. **General space systems data bus aspects**
   4.1. Evolutions in standards, protocols and architectures
   4.2. Advances in harnesses, wires/wireless & connectors
   4.3. Data controllers, bus and micro-controllers
   4.4. Operating System (OS) front-ends

5. **Advances in processors/processing**
   5.1. High performance and High reliability
   5.2. Radiation hardening aspects (hardening by design, packaging...)
   5.3. Next generation processing: new technologies, new products
   5.4. System specific OBC solutions
   5.5. EEE supporting processing/processors

6. **Commercial Off The Shelf (COTS) solutions and applications in space (and hi-rel) systems**
   6.1. Use of COTS in high demanding application missions
   6.2. Use of COTS in the context of small and nano-satellite missions
   6.3. Using COTS to achieve large series productions

7. **The avionics workshop**:
   7.1. Avionics and data handling (Attitude and Orbit Control System (AOCS) / Guidance, Navigation and control (GNC) sensor data handling & on-board computers)
   7.2. Avionics solutions and architectures for reference autonomy applications (launcher, rovers/robotic systems, exploration missions, complex applications...)
   7.3. Networks and sensors
   7.4. Embedded systems / real-time systems
   7.5. Fault Detection, Isolation & Recovery (FDIR)

8. **Panel & Showcase sessions, on request:** In case you wish to host a specific Panel/Showcase section, please contact us for discussion.

    Potential topics:

8.1. Specific Programme/Mission outcome

8.2. Major Data System breakthrough

8.3. Sponsored presentation

Conference practicalities

Official language

The official language is English.

Conference timeline

The timeline at a glance

- January 10th 2024 - Conference Registration and Reservation Forms available at the Eurospace website: http://eurospace.org/dasia-conference.aspx
- February 10th 2024 - Deadline for submission of abstracts
- March 4th 2024 - Selection of papers and preparation of the Conference Program.
  - Presenters will be informed within 2 days
- March 18th 2024 - The Conference Program is published on Eurospace website
- May 13th 2024 - Deadline for Registration to DASIA 2024
- May 28th 2024 - Start of DASIA 2024
- May 30th 2024 - End of DASIA 2024
- July 1st 2024 - Deadline for submission of full papers.

Registration and conference secretariat

- The Conference Registration form will be provided upon request. Please contact us at: dasia@eurospace.org

Conference Sessions

- Conference **starts on Tuesday May 27th, 2024 at 9:00**
  - The opening session on Tuesday morning includes a keynote presentation. It will be followed by paper presentations that will be presented in two parallel sessions.
  - Three days are assigned to paper presentation sessions.
  - Each session includes on average three presentations grouped by technology themes and application areas.
- Conference **ends in the late afternoon on Thursday May 30th, 2024**.

Presentation guidelines

- Presentations should not exceed 30 minutes, including Q&A session.
- For any specific request please contact the Conference Manager.

Vendors/Sponsors/Exhibitors

Each vendor will be allocated a floor size of 4.5 m2 (3 x 1.5 m) where they can establish their stand assuming that the vendor supplies their own poster boards.

Tables and chairs may be supplied.

Additional equipment (such as screens) may be rented from the hotel.

During the conference second morning (Tuesday May 29th), exhibitors will have the opportunity to present their products. They are kindly asked to book a slot as soon as possible.

Special Theme/Panel Sessions And Invited Presentations

DASIA 2024 will also provide opportunities for keynote presentations and workshops/panels in plenum, with contributions from invited speakers and/or from the conference participants.

Participants and exhibitor fees

- The Conference fee is € 940 per participant, speakers and session chairs.
- Student/retired participants fee is 470 €.
- Exhibitors is 2,500 € for an exhibition stand including the fee of one participant.
- Sponsors: sponsorship packages will be offered. Please contact us to get more information.

Conference Registration Form will be provided upon request.

DASIA Organising Committee

- N. Alecton Conference Manager - dasia@eurospace.org
- V. Marie Support for presenters & panellists – valentin.marie@eurospace.org

DASIA Programme Committee

- P. Lionnet Eurospace (Acting Committee Chair)
- L. Beugnet Airbus Defence & Space SAS
- A. Canals CS Group
- P. Dandre Thales Alenia Space France
- S. Duncan Thales Alenia Space UK
- I. Eballard ArianeGroup
- G. Estaves Thales Alenia Space France
- D. Felbach OHB Systems AG
- J. Fuchs ESA/ESTEC
- R. Gerlich Hochschule Furtwangen University
- S. Habinc Cobham Gaisler
- H-J. Herpel Airbus Defence & Space GmbH
- U. Hoch Airbus Defence & Space GmbH
- Ch. Honvault ESA/ESTEC
- U Kulau DSI Aerospace Technology GmbH
- D. Lagarde Thales Alenia Space France
- J-B. Lambert CNES
- Ch. Lemercier Airbus Defence & Space SAS
- B. Leroy Airbus Defence & Space SAS
- Ph. Miramont CNES
- M. Montagna Thales Alenia Space Italy
- J-L. Poupat Airbus Defence & Space SAS
- Ch. Steiger ESA/ESOC
- F. Warfelmann Airbus Defence & Space GmbH
- A. Zadeh ESA/ESTEC