

*BAASP 2019 – 6th International Scientific
Conference*

"BALTIC APPLIED ASTROINFORMATICS AND SPACE DATA PROCESSING"

August 21-23, 2019
Ventspils, Latvia

INVITATION TO CONFERENCE CALL FOR PAPERS

We invite you to the 6th International Scientific Conference “Baltic Applied Astroinformatics and Space data Processing” (BAASP) which will be held at **Ventspils University of Applied Sciences** and organized by Engineering Research Institute “Ventspils International Radio Astronomy Center” (VIRAC) of Ventspils University of Applied Sciences.

The aim of the Conference

The Conference is collaboration platform for cross border partnership and knowledge transfer for astronomers, astrophysicists, space researchers and engineers as well as experts in related research disciplines in fields such as informatics, electronics, satellite technology, geodesy and environment sciences. While the general scope of BAASP is wide, this year’s specific themes are **astrophysics, space technologies and remote sensing**.

Conference Theme

Space science is being fundamentally influenced and empowered by computation and information technology, and it stimulates further technological developments. Astronomy, like many other fields, is becoming exponentially data-rich, and the tasks of data management, data acquisition, and knowledge discovery become central to our research organisation, bringing together many technical and methodological challenges. Information technology also provides the stage where we collaborate and interact, and publish, preserve, use and disseminate knowledge. The general philosophy behind is to be future-oriented, which determines the emerging discipline of astroinformatics.

Recent challenges are directed to more human-orientated, highly personalized and trustworthy systems enabling their users to cope with the large variety of frameworks, technologies, data volumes and tools needed to accommodate emerging scientific applications. Therefore, one of the areas of focus here is quantitative and qualitative methods for exploiting, predicting, and understanding the value that information and communication state of art technologies brings to space science, astronomy, geodesy and related fields.

The scope of the conference covers fundamental and applied research that related to space technologies, and includes the following:

- ✓ **space science**, including space and atmospheric physics, Earth observation and remote sensing from space, planetary sciences, astrochemistry, space geodesy, astronomy and astrophysics;

- ✓ **space engineering**, including communications, navigation, space operations, satellite design, testing, and implementation, engineering of new generation radio telescope frontend and backend solutions;
- ✓ **space and industrial IT solutions**, including data acquisition, signal processing, data correlation, data recording, transfer, processing and archiving high performance and cloud computing techniques.

The key focus in 2019

Astrophysics, remote sensing and new generation radio electronics.

The conference is planned in parallel sessions:

- ✓ Astrophysics is driven by the exploitation of astronomical observations, which includes data processing, interpretation, and putting the results in an appropriate scientific context to understand the underlying physical phenomena. The path from observations to discoveries is the focus of BAASP 2019.
- ✓ Remote sensing is another example, where technologically complex investment ultimately yields scientific and commercially useful results. Besides observations of the Earth, this includes also the Moon and other planets, satellites, even comets, and asteroids in the Solar system. With BAASP 2019, we aim to enable a discussion on aspects of data processing and interpretation in remote sensing.
- ✓ New generation radio electronics is the basis of new discoveries in astrophysics and radio astronomy since novel technology implementations of new modern radio systems enhance the properties of current radio-astronomy instrumentation thus improving specific observing capabilities. The development of both signal processing hardware and software is also the scope of BAASP 2019.

Important Dates

May 10 Abstract submission (abstract for presentation or paper);

May 27 Abstract acceptance (abstract for presentation or paper);

June 25 Paper submission (formatted full text) and registration: <http://virac.eu/en/events/baasp/registration/>;

July 15 Acceptance decision;

EARLY registration fee until **July 31**;

STANDARD registration fee until **August 15**.

December 1 Final version. Full Paper submission for Conference proceedings

Accepted papers will be publish in following journals:

The scope of the conference covers applied research that related to space technologies and instrumentation, and includes the following:

for **LATVIAN JOURNAL OF PHYSICS AND TECHNICAL SCIENCES (SCOPUS and WoS)**:

- space engineering, including communications, navigation, space operations, satellite design, testing, and implementation, engineering of new generation radio telescope frontend and backend solutions.

Guide to Authors: <https://ej.uz/guideforlatvianjournal>

The scope of the conference covers fundamental research that related to astronomy, astrophysics and space science and includes the following:

for **ASTRONOMICAL AND ASTROPHYSICAL TRANSACTIONS (AApTr)** or **PROCEEDINGS OF SCIENCE (PoS)** (SCOPUS and WoS)

- space science, including space and atmospheric physics, Earth observation and remote sensing from space, planetary sciences, astrochemistry, space geodesy, astronomy and astrophysics;
- space and industrial IT solutions, including data acquisition, signal processing, data correlation, data recording, transfer, processing and archiving high performance and cloud computing techniques.

Guide to Authors: <http://ej.uz/guideforaat>

Registration

Registration is available at the website <http://virac.eu/en/events/baasp/registration/>

Enquiries please send by e-mail: baasp2019@venta.lv

Web page: <http://virac.eu/en/events/baasp/registration/>

The registration fee is:

- ✓ 100 EUR (50 EUR for students) before July 31, 2019
- ✓ 120 EUR (60 EUR for students) before August 15, 2019

Conference registration fee will cover: participant package, lunch, Conference dinner and refreshments during the Conference, publication of the abstract in the Conference Abstract Book and selected papers will be published in the Sciendo “Latvian Journal of Physics and Technical Sciences” (SCOPUS and WoS) or ASTRONOMICAL AND ASTROPHYSICAL TRANSACTIONS (AApTr) (SCOPUS).

Scientific Organizing Committee

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Dr. Gino Tuccari National Institute of Astrophysics, Institute for Radio Astronomy of Bologna (ITALY)
Dr. M.I.Ryabov Odessa observatory "URAN-4" RI NANU and Odessa I.I.Mechnikov National University (UKRAINE)
Dr. Andrzej Krankowski University of Warmia and Mazury (POLAND)
Dr. Bartosz Dąbrowski University of Warmia and Mazury (POLAND)
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Dr. Andrey M. Soboev Ural Federal University (RUSSIA)

Local Organizing Committee

Romass Pauliks (Chairman), Vladislavs Bezrukovs (Vice Chairman), Ieva Kozlova, Baiba Šefanovska, Daiga Druvaskalne.

Preliminary Schedule of Conference

There will be two types of presentations at the conference: plenary talks (40 minutes talk), section talks (15-20 minutes).

Wednesday, August 21

14:00-15:30 Arrival

15:30-16:00 Registration

16:00-20:00 Opening and Refreshments

Thursday, August 22

08:30-09:00 Registration

09:00-10:30 Opening, keynote speakers

10:30-11:00 Coffee break

11:00-13:00 Work in sections

13:00-14:00 Lunch

14:00-15:30 Work in sections

15:30-16:00 Coffee break

16:00-18:00 Work in sections

19:00 Conference dinner

Friday, August 23

09:00-10:30 Keynote speakers

10:30-11:00 Coffee break

11:00-13:00 Work in sections

13:00-14:00 Lunch

14:00-15:00 Closing remarks

15:00-18:00 Meetings/Excursions

Accommodation

You can find the corresponding information about accommodation at Ventspils web site:

<http://www.visitventspils.com/en/start/>

Information and address for correspondence

Questions regarding the conference should be addressed to the local organizing committee (e-mail:

baasp2019@venta.lv; <http://virac.eu/en/events/baasp/>)

Address for the correspondence:

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<http://virac.eu/en/events/baasp/>