

*BAASP 2017 – 5th International Scientific
Conference*

**"BALTIC APPLIED
ASTROINFORMATICS AND SPACE
DATA PROCESSING"**

August 23-24, 2017
Ventspils, Latvia

**INVITATION TO CONFERENCE
CALL FOR PAPERS**

We invite you to the 5th **International Scientific Conference “Baltic Applied Astroinformatics and Space data Processing”** (BAASP) which will be held at **Ventspils University College** and organized by Engineering Research Institute “Ventspils International Radio Astronomy Center” (VIRAC) of Ventspils University College.

Aim of the Conference

The Conference is intended as a 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, environment, geology, geodesy, and material sciences. While the general scope of BAASP is wide, this year’s specific themes are astrophysics, new generation radio electronics, and remote sensing. The conference focuses on the Baltic region but we also cordially invite participants from other countries.

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 ICT 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, astrogeology, astrobiology and life sciences, astronomy and astrophysics;
- ✓ **space engineering**, including communications, navigation, space operations, satellite design, testing, and implementation, engineering of new generation telescopes;
- ✓ **space and industrial IT solutions**, including data acquisition, buffering, signal processing, data correlation, data recording, transfer, processing and archiving, high performance and cloud computing techniques.

Key focus in 2017

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 2017.
- ✓ 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 2017, 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 astronomy since novel technology implementations of existing system blocks and 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 2017.

Working language of the conference is English.

Important Dates

- ✓ **May 22, 2017:** Early bird registration, Abstract submission and payment;
- ✓ **June 19, 2017:** Late registration, Abstract submission and payment;
- ✓ **August 7, 2017:** Full Paper submission for Conference proceedings - VIRAC journal "Space Research Review" vol.5.

Registration

Please send filled registration form by e-mail: baasp2017@venta.lv

The registration fee is:

- ✓ 100 EUR before May 22, 2017
- ✓ 120 EUR before June 19, 2017

Conference registration fee will cover: participant package and badge, lunch, dinner, and refreshments during the Conference, publication of the abstract in the Conference Abstract Book.

Participants are responsible for their **own transportation** to and from Ventspils, Latvia, as well as for **hotel arrangement and costs**.

Payment method - money transfer to our bank account.

Receiver of money: Ventspils University College

Name of the bank: Valsts kase

Account No. (IBAN): LV23TREL9150140000000

SWIFT: TRELLV22

Purpose of payment: 21399, registration fee for the conference BAASP 2017.

Conference publications

All abstracts will be published in the Conference Abstract Book.

Abstract: should consist of minimum 1500 characters and maximum 4000 characters (Microsoft Word or Open Office file, Times New Roman, 12 pt).

All participants are invited to submit manuscripts to conference proceedings in the VIRAC journal "Space Research Review" vol.5 with an ISBN number. All papers will be peer-reviewed. Detailed instructions for full papers will be sent upon acceptance of abstracts.

Scientific Organizing Committee

Dr. Andris Vaivads (Chairman) Swedish Institute of Space Physics (SWEDEN)

Dr. Leonid Gurvits* Joint Institute for VLBI (JIVE) (NETHERLANDS)

Dr. Gino Tuccari National Institute of astrophysics, Institute for Radio Astronomy of Bologna (ITALY)

Dr. Dainis Dravins* Lund Observatory (SWEDEN)

Dr. Tonu Viik Tartu Observatory (ESTONIA)

Dr. Grazina Tautvaisiene Vilnius University (LITHUANIA)

Dr. Guntars Balodis Riga Technical University (LATVIA)

Dr. Ilmars Eglitis* University of Latvia, Institute of Astronomy (LATVIA)

Dr. Janis Kaminskis Riga Technical University (LATVIA)

Dr. Ivars Shmelds Ventspils University College (LATVIA)

Dr. Boris Ryabov Ventspils University College (LATVIA)

Dr. Juris Kalvans Ventspils University College (LATVIA)

Dr. Normunds Jekabsons* Ventspils University College (LATVIA)

**Conditional attendance*

Local Organizing Committee

Boris Ryabovs (chairman), Juris Kalvans, Ieva Kozlova, Eva Fibiga, Karlis Berzins.

Preliminary Schedule of Conference

There will be two types of presentations at the conference: plenary talks (27 minutes talk + 3 minutes for questions), section talks (15-20 minutes, including 3 minutes for questions).

Wednesday, August 23

8:30-9:00	Registration
9:00-10:30	Opening and plenary session
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

Thursday, August 24

9:00-10:30	Work in sections
10:30-11:00	Coffee break
11:00-13:00	Work in sections
13:00-14:00	Lunch
14:00-15:00	Closing remarks

In order to avoid technical problems, it is desirable to send the full presentation file by email to baasp2017@venta.lv before August 20, 2017. Acceptable formats are .pptx, .ppt, .pdf, maybe archived as .zip files. Our e-mail system accepts files of size not exceeding 10 MB; if this limit is too stringent then the participant can bring the file with himself (herself) on flash, DVD or CD. Files will be demonstrated only from our computer; it will not be possible to connect the participant's computer to the projector.

Accommodation and transportation

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

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

Riga International Airport is located 13 kilometers from the city center. Taxi should cost approximately 15 EUR, we recommend to take green Airbaltic taxi. There are also regular bus connections from the airport to the city center: please take bus No 22 (<http://www.riga-airport.com/en/main/passengers/useful-information/getting-to-the-airport/public-transport>).

Information how to get from and to Riga International Airport can be found here: <http://www.riga-airport.com/en>.

Ventspils (<http://www.ventspils.lv/eng/>) is located 190 km from Riga. The most convenient way to get to Ventspils is by bus from Riga Bus Station. Please see the bus schedule on <http://www.1188.lv/transport> and allow approximately 3 hours for the trip. There is also a direct Stena Line ferry link from Nynäshamn (Sweden) to Ventspils.

Information and address for correspondence

Questions regarding the conference should be addressed to the local organizing committee (e-mail: baasp2017@venta.lv).

Address for the correspondence:

Ventspils University College
Inzenieru Street 101
Ventspils, LV-3601, Latvia