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### **Call for Abstracts**

# XXXIV OSTIV Congress, Příbram, Czech Republic

28 July-3 August, 2018

The XXXIV Congress of the International Scientific and Technical Organisation for Soaring Flight (Organisation Scientific et Technique Internationale du Vol à Voile, OSTIV) will be held at the site of the 34th FAI World Gliding Championships in the Open, 18m and 15m Classes, Příbram, Czech Republic from 28 July to 3 August, 2018. The Congress addresses all scientific and technical aspects of soaring flight including motorgliding, hang gliding, paragliding, ultralight sailplanes and aeromodeling.

Opportunity for presentation and discussion is given in the following categories:

**Scientific Sessions:** Meteorology, Climatology and Atmospheric Physics as related to soaring flight.

**Technical Sessions:** Aerodynamics, Structures, Materials, Design, Maintenance and Sailplane development.

**Training and Safety Sessions:** Training and Safety, Coaching, Health and Physiology.

**Joint Sessions:** Scientific and technical topics, reviews or news, presented in an informative and entertaining way for the broader interest of the World Gliding Championships and OSTIV.

Topics on instrumentation, electronics, statistics and other system technologies will be included in the sessions for which the application of the technology is most relevant.

# **Typical and Suggested Topics**

Scientific Sessions

- Meteorology:
  - Meteorological data acquisition and service for gliding operations
  - Weather forecasting for soaring flight
- Climatology:
  - Climates that support soaring flight
  - Climate-change and soaring
- Atmospheric Physics:
  - Mesoscale and small convective, baroclinic or orographically induced phenomena
  - New observations; measurements or analysis of convergence lines, cellular patterns, shear structures, standing and moving waves, short period cycles, turbulence, boundary layer in complex terrain

- Analytical techniques of delineating thermal and mesoscale structures from routine or experimental ground or flight data, or from remote sensors
- Modeling of thermals, mesoscale or microscale structures

#### **Technical Sessions**

The technical sessions will cover all aspects of design, development and operation of sailplanes, motorgliders, ultralights and solar-or human-powered aircraft. Topics may include, but are not limited to:

- Airworthiness, structural concepts, new materials, fatigue, crashworthiness, manufacturing processes
- Aerodynamics and flight mechanics
- Trajectory optimization
- Stability and control
- · Airframe vibration and flutter
- Propulsion systems
- Design integration and optimization
- New developments in flight testing
- Airworthiness requirements
- Cockpit instruments, including navigation instruments (GPS etc.)
- Autonomous soaring

## Training and Safety Sessions

Training and Safety sessions will be held on subjects covering disciplines such as

- Flight training, theory and analysis of techniques and results, psychology, objectives, training facilities and material
- Human and medical factors in aircraft design and operation
- Piloting techniques
- Flight operation in controlled airspace
- · Safety devices

Joint Sessions

Joint Sessions cover topics of general interest in the field of gliding such as

- · Soaring history
- General philosophy of competition classes
- Documentation of badge and record flights
- Common interests with other air sports like hang gliding, paragliding, microlights and ultralights
- Human-powered flight; Solar-powered flight

### **Deadline for Abstracts and Summaries**

The deadline for the Abstracts — maximum two A4 pages including figures — is **31 January, 2018**. Letters of acceptance will be mailed by **28 February, 2018**. Final four-page summaries of your contribution will be included in the conference booklet and are due by **1 June, 2018**. Full papers are not required but presenters are encouraged to prepare full papers for submission to *Technical Soaring* (www.ostiv.org/publications.html), OSTIV's refereed international journal (ISSN 0744-8996).

Please use the form below to send a copy of your Abstract to the OSTIV Secretariat, clearly marked for either the Scientific, Technical, Training and Safety, or Joint session.

Oral presentations at the Congress will be limited to 30 minutes.

There is **no registration fee** for the Congress!

If you would like to attend the Congress, please complete the form below and send it to the OSTIV Secretariat at admin@ostiv.org. Further information about OSTIV and the Congress can be obtained from the Secretariat or from the OSTIV website, www.ostiv.org.

### **Best Student Papers Awards**

Awards of EUR 200 will be presented to the students delivering the best presentations in the Scientific and Technical Sections. To be eligible, presenters must be the first author and submit an abstract and fourpage summary by the aforementioned deadlines, as well as a manuscript to *Technical Soaring* prior to the Congress. Students who are unable to attend the Congress may designate a representative to present the work on their behalf.

### Call for nominations OSTIV Plaque / Klemperer Award

During the Opening Ceremony of OSTIV Congresses the OSTIV Plaque and Klemperer Award may be presented to the person who has made the most noteworthy scientific and/or technical contribution to soaring flight in recent years. All Active and Individual OSTIV Members can send in nominations. In making such nominations, particular attention should be given to recent contributions to soaring flight by the nominee, although earlier outstanding work also will be taken into account. Nominations should include details of the nominee's contributions and a short biography. All nominations for the OSTIV Plaque / Klemperer Award must be received by R. Radespiel, OSTIV President, c/o TU Braunschweig, Institute of Fluid Mechanics, Hermann-Blenk Str. 37, D-38108 Braunschweig, Germany, president@ostiv.org by 31 January, 2018.

Note of interest / Pre-Registration Form and Extended Abstract, XXXIV OSTIV Congress, 28 July-3 August, 2018  Please send this pre-registration form to admin@ostiv.org no later than 31 January, 2018
<ul> <li>□ Please, send general information about OSTIV</li> <li>□ Please, put my name on the mailing list for further information about the XXXIV OSTIV Congress</li> <li>□ I wish to attend the XXXIV OSTIV Congress in the:</li> </ul>
☐ Scientific Session ☐ Technical Session ☐ Training and Safety Session ☐ Joint Session
Name:
Phone:
Title of presentation: