

The Fourth International Symposium on GPS/GNSS

First Announcement and Call for Papers

November 6 - 8, 2002 Wuhan, China

**Organized by
Wuhan University
International Association of Chinese Professionals in Global Positioning
Systems(CPGPS)
China Technical Application Association for GPS (CTAAG)**

**Sponsored by
National Natural Science Foundation of China
The Institute of Navigation (ION)
The University of Calgary**

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Invitation

On behalf of the Organizing Committee, I am pleased to invite you to attend the 4th International Symposium on GPS/GNSS, which will be held in Wuhan, China, from November 6 – 8, 2002.

The conference is the biggest GPS/GNSS meeting in Asia and one of the major international forums for global positioning and navigation technology. It will bring together internationally recognized experts and offer you a unique opportunity to share knowledge and experience and to stay in touch with the latest technology advances and applications in GPS/GNSS.

You are warmly welcomed to participate in this significant symposium by submitting your research paper or by taking part in the technology and product exhibition, which will run in parallel with the technical programmes. City sightseeing and a trip to world famous Three Gorges will be organized.

We are looking forward to seeing you in Wuhan!

Yours truly,

Jingnan Liu

Chairman, Organization Committee
Professor and Vice President of Wuhan University

Session Programme

GPS/GNSS Status, Modernization and Augmentations

- Government policy for space-based systems
- Current system status, performance, future upgrades and impact
- Ground control and space infrastructure
- GPS modernization, new signals and code structures
- Space-based augmentations, system interoperability
- Global satellite positioning systems other than GPS/GNSS

Navigational and Positioning Infrastructure, Network-based Services

- Regional and international continuously operating networks
- Integrated GPS/GNSS services and experiences
- Information/communication network for navigation services
- Network-based RTK techniques and services
- Ground-based augmentations, wide area/global differential GPS systems

Receiver and Antenna Technology, New Products

- Hardware and software developments
- Chip technology
- OEM equipment, integrated receiver systems and sensors
- Introduction of new products as well as services.
- Indoor GPS
- Antenna technology

Geodesy, Timing , Frequency and Scientific Applications

- GPS/GNSS for precision and real time geodesy
- Earthquake and deformation monitoring, geodynamics applications
- Engineering surveying, construction application and engineering structure monitoring
- GPS-based time keeping ,synchronisation, performance and applications
- Atmospheric water vapour sensing and other innovative scientific applications

Land, Marine, Air and Space Navigation Applications

- Mobile mapping , GPS for precision farming
- Bathymetric/hydrographic surveys, shipping and remote sensing applications
- GPS-based orbit determination, autonomous navigation and flight control
- Advances in spaceborne hardware, GPS-aided space scientific experiments and applications

New Concepts, Algorithms, Innovative Strategies and Applications

- QC and integrity issues
- Multipath modelling and mitigation
- Improved ambiguity resolutions, long-range/wide area RTK
- Low-cost solutions and Integrated solutions
- New models and strategies for improved positioning/navigation performance

Paper Abstract and Due Dates

Abstracts should include the paper titles, a list of author names, affiliations, the author's complete contact mailing address, phone, fax and e-mail. Abstracts should be between 300 and 500 words, and describe objectives, methods, results, conclusions and significance of your work. All abstracts are preferably submitted via e-mail to gnss@wtusm.edu.cn as a word text format. You may fax your abstract to us at +86-27-87876495-13 in case you do not have e-mail access. The deadline for abstract submission is **April 30, 2002**. You will be noticed of acceptance after **May 31, 2002**. The full papers are due on **July 31, 2002**.

Registration

Student rate: \$US 50

Regular rate: \$US 200

Registration includes all the technical sessions, access to the exhibition, and published book of the proceedings.

Exhibition and Advertisement:

Advertisement on proceedings: \$US 600

Exhibition booth: \$US 1000

Exhibition and Advertisement: \$US 1500

Conference Secretariat

GNSS Symposium Service

GPS Engineering Research Centre

Wuhan University

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Positioning Technology for Location-Based Services (or20)

Part of SPIE's 17th Annual International Symposium on
AeroSense

21–25 April 2003 • Gaylord Palms Resort and Convention Center • Orlando, Florida USA

Conference Chair: **Yilin Zhao**, Motorola, Inc.

Program Committee: **Scott Bloebaum**, Enuvis, Inc.; **James Caffery, Jr.**, Univ. of Cincinnati; **Chris Drane**, Cambridge Positioning Systems Ltd. (Australia); **Stephen Edge**, Siemens Information and Communication Mobile LLC; **G. Jeffrey Geier**, Motorola, Inc.; **Johan Hjelm**, Ericsson Research (Sweden); **Jean-Michel Rousseau**, Nokia Mobile Phones; **Len Sheynblat**, Qualcomm Inc.

Finding the location of a mobile phone is one of the important features of the new mobile communications systems. This feature can enable many valuable location-based services. Due to the unique characteristics of the cellular environment, it is a great challenge to locate a caller with an accuracy of less than 50 meters in 67 percent of cases and less than 150 meters in 95 percent of cases as mandated by the U.S. government. The recent advancement of the positioning technology has led to many exciting developments. The purpose of this conference is to present the latest positioning solutions, system implementations, evaluation results, as well as location enabled services.

Papers are solicited in the following areas:

Satellite-Based Technology for Location Services

- assisted GPS
- Galileo
- GLONASS
- other satellite-based techniques
- integration with the phone
- etc.

Terrestrial-Radio-Based Technology for Location Services

- angle of arrival (AOA)
- time of arrival (TOA)
- time difference of arrival (TDOA)
- hybrid methods
- integration with the phone
- etc.

Location-Based Services and Applications

- emergency services
- E911/E112
- information
- wireless Web-based services
- other services
- etc.

Abstract Due Date: 23 September 2002
Manuscript Due Date: 24 March 2003



SPIE—The International Society for Optical Engineering

SPIE—The International Society for Optical Engineering is dedicated to advancing scientific research and engineering applications of optical, photonic, imaging, and optoelectronic technologies through its meetings, education programs, and publications.

Submission of Abstracts for AeroSense symposium

Abstract Due Date: **23 September 2002**

Manuscript Due Date: **24 March 2003**

Submissions imply the intent of at least one author to register, attend the symposium, and present the paper (either orally or in poster format), and submit a full-length manuscript.

Instructions for Submitting Abstracts

All authors are STRONGLY ENCOURAGED to submit their abstracts by the due date using the "submit an abstract" link on the Web at:

www.spie.org/infolor/

Using this method of submission ensures that your abstract will be immediately accessible to the conference chair for review. Using other methods of submission (listed below) will delay the processing of your abstract.

- or E-MAIL each abstract separately to: abstracts@spie.org in ASCII text (not encoded) format. IMPORTANT: to ensure receipt and proper processing of your abstract, the Subject line must include only the following:
SUBJECT: OR20, ZHAO

- or MAIL your abstract to:
AEROSENSE
SPIE, P.O. Box 10, Bellingham, WA 98227-0010 USA
Shipping Address: 1000 20th St., Bellingham, WA 98225 USA

- or FAX one copy to SPIE at 360/647-1445 (send each abstract separately).

Oral or Poster Presentation

Instructions for Oral and Poster presentations will be included in your author kit. All Oral and Poster presentations are included in the *Proceedings of SPIE* and require a manuscript.

Proceedings of SPIE

These conferences will result in full-manuscript Chair/Editor-reviewed volumes published in the Proceedings of SPIE. Correctly formatted, ready-to-print manuscripts are required from all accepted authors. Electronic submissions are highly preferred, and result in higher quality reproduction. Submission must be made in PostScript created with a printer driver compatible with SPIE's online Electronic Manuscript Submission system. Manuscripts must be submitted in English by 24 March 2003. Authors are required to transfer copyright of the manuscript to SPIE or to provide a suitable publication license. Papers published are indexed in leading scientific databases including INSPEC, Compendex Plus, Physics Abstracts, Chemical Abstracts, International Aerospace Abstracts, and Index to Scientific and Technical Proceedings.

Publishing Policy

Manuscript due dates must be strictly observed. Late manuscripts may not be published in the Proceedings of SPIE, whether the conference volume will be published before or after the meeting. The objective of this policy is to better serve the conference participants as well as the technical community at large, by enabling timely publication of the Proceedings. **Papers not presented at the meeting will not be published in the conference Proceedings**, except in the case of exceptional circumstances at the discretion of SPIE and the Conference Chair/Editors.

Participant Registration Fee

Authors, coauthors, program committee members, and session chairs are accorded a reduced symposium registration fee. If you are a current **SPIE Member** you will enjoy an additional discount on your symposium registration fee and on educational short courses.

1. **SUBMIT TO:** OR20, ZHAO
2. **SUBMIT EACH ABSTRACT TO ONE CONFERENCE ONLY** Positioning Technology for Location-Based Services (or20)
3. **ABSTRACT TITLE**
4. **AUTHOR LISTING** (principal author first)
For each author: First (given) name (initials not acceptable), Last (family) name, Affiliation, Mailing address, Telephone, Fax, and Email address.
5. **PRESENTATION**
Indicate your preference for "Oral Presentation" or "Poster Presentation." Final placement is subject to chairs' discretion.
6. **BRIEF BIOGRAPHY** (principal/presenting author)
Approximately 50 words.
7. **ABSTRACT TEXT**
Approximately 250 words.

Your abstract must include all of the following: Conditions of Acceptance

- **Authors are expected to secure registration fees and travel and accommodation funding, independent of SPIE, through their sponsoring organizations before submitting abstracts.**
- Only original material should be submitted.
- Commercial papers, descriptions of papers with no research/development content, and papers where supporting data or a technical description cannot be given for proprietary reasons will not be accepted for presentation in this symposium.
- Abstracts should contain enough detail to clearly convey the approach and the results of the research.
- Government and company clearance to present and publish should be final at the time of submittal. Authors are required to warrant to SPIE in advance of publication of the Proceedings that all necessary permissions and clearances have been obtained, and that submitting authors are authorized to transfer copyright of the paper to SPIE .
- Applicants will be notified of acceptance by mail no later than 27 January 2003. Early notification of acceptance will be placed on the SPIE Web site the week of 2 January 2003 at www.spie.org/info/or/

Paper Review

To ensure a high-quality conference, all abstracts and Proceedings of SPIE manuscripts will be reviewed by the Conference Chair/Editor for technical merit and suitability of content. Conference Chair/Editors may require manuscript revision before approving publication, and reserve the right to reject for presentation or publication any paper that does not meet content or presentation expectations. SPIE's decision on whether to publish manuscripts is final.