



European
Global Navigation
Satellite Systems
Agency



UNIVERSITAT POLITÈCNICA
DE CATALUNYA
BARCELONATECH



HORIZON 2020

GNSS Excellence Week

Barcelona, Spain, 19-21 January 2016

Organised by the Research Group of Astronomy and Geomatics (gAGE/UPC)

Scope of the Workshop

The objective of the GNSS Excellence Week is to provide to young researchers the possibility to discuss, benchmark and get advice about their own research work by meeting some of the best non-European and European researchers. It includes seminars to students and researchers as well an interactive workshop. Complementary actions are the provision of lectures from the guest researcher towards graduate students, interface with local industrial actors and interaction with local researchers.

This workshop is complementary with respect to the PhD training, and other activities of the E-KnoT project <http://www.eknotproject.eu>.

Invited Speakers

- **Dr. Juan Blanch**, Senior Researcher Engineer *Stanford University, USA*
- **MSc. Jordi Alba Granados**, Secretariat for Universities and Research. *Generalitat de Catalunya, Spain*
- **Dr. David Altadill**, Director of Ebre Observatory. *Ebre Observatory, Spain*
- **Dr. Àngela Aragón Angel**, Scientific Support Officer *European Commission, Joint Research Centre (JRC), Italy*
- **MSc. Anna M. Baron**, Developer at Geodesy Unit in ICGC *Institut Cartogràfic i Geològic de Catalunya (ICGC), Spain*
- **MSc. Beatriz Bonet**, GNSS Project Manager *GMV, Spain*
- **Prof. Dr. Adriano Camps**, Full Professor *Universitat Politècnica Catalunya (UPC), Spain*
- **MSc. Pere Durbà**, Senior Project Manager *Satellite Navigation Systems, Indra, S.A., Spain*
- **MSc. Jorge Fuentes**, Manager of ESA BIC Barcelona *ESA BIC Barcelona, Spain*
- **Dr. Miquel García-Fernandez**, Technical director *Rokubun, Spain*
- **Prof. Dr. Guillermo González**, Associate Professor *Universitat Politècnica Catalunya (UPC), Spain*
- **Prof. Dr. José M. Juan Zornoza**, Associate Professor *Universitat Politècnica Catalunya (UPC), Spain*
- **Dr. Xianglin Liu**, Lead of GNSS Algorithm Team *Fugro Intersite B.V., The Netherlands*
- **Prof. Dr. José A. López-Salcedo**, Associate Professor *Univ. Autònoma de Barcelona (UAB), Spain*
- **Dr. Raül Orús Pérez**, Propagation Engineer *ESTEC/ESA, The Netherlands*
- **MSc. Jorge Querol**, Winner of ESNC BCN Challenge *Universitat Politècnica Catalunya (UPC), Spain*
- **Dr. Pere Ramos Bosch**, Flight Dynamics Engineer *ESOC/ESA, Germany*
- **MSc. Marc Solé**, Aerospace Engineer *Pildo Labs, S.L., Spain*



**Venue: Universitat Politècnica de Catalunya
C/. Jordi Girona, 31, Rectorate Building.**

Chairman: Jaume Sanz (jaume.sanz@upc.edu)





Tuesday Jan 19th, 2016

13:00-13:40 Registration

Session 1: GNSS Navigation and Integrity

14:00-14:40 Multi-constellation GNSS integrity: the aviation example

Dr. J. Blanch (Stanford Univ., USA)

14:40-15:20 Sequential tests for GNSS signal-level integrity

Dr. J.A López -Salcedo (UAB, Spain)

Coffee Break

15:40-16:20 World-wide Fast-PPP with ambig Fixing

Dr. JM Juan (gAGE/UPC, Spain)

16:20-17:00 FENIX-Front-End GNSS Interference eXcisor

MSc. J. Querol (UPC, Spain)

Coffee Break

17:20-17:50 Discussion with PhD. Students

Moderator: Dr. J. Blanch (Stanford Univ., USA)

Wednesday Jan 20th, 2016

Session 2: GNSS Industry

08:30-09:00 Indra Activities on GNSS

MSc. P. Durba (Indra, Spain)

09:00-09:30 Pildo Activities on GNSS

MSc. M. Solé (Pildo Labs, Spain)

09:30-10:00 Fugro Activities on GNSS

Dr. Xianglin Liu (Fugro, The Netherlands)

10:00-10:30 ESA BIC Barcelona, the space technology business incubator in BCN

MSc. J. Fuentes (ESA BIC Barcelona, Spain)

Coffee Break

11:00-11:30 GMV Activities on GNSS

MSc. B. Bonet (GMV, Spain)

11:30-12:00 Industrial Doctorate

MSc. J. Alba (Secr. for Univ. and Res.)

12:00-12:30 So, you want to be a GNSS Engineer?

Dr. M. García-Fernández (Rokubun, Spain)

12:30-13:00 Professional Careers at ESA

Dr. P. Ramos (ESOC/ESA, Germany)

Lunch (included)

Final Programme

Wednesday Jan 20th, 2016

Session 3: GNSS signal propagation

14:30-15:10 Propagation effects and related error sources on GNSS signals

Dr. R. Orús (ESTEC/ESA, The Netherlands)

15:10-15:50 GNSS related activities at JRC

Dr. A. Aragón (EC, JRC, Italy)

Coffee Break

16:20-17:00 Net-TIDE project. Identifying TIDs

Dr. D. Altadill (Ebre Observatory, Spain)

17:00-17:40 Sounding the ionosphere/ plasmasphere with radio occultations

Dr. G. Gonzalez (gAGE/UPC, Spain)

Coffee Break

18:00-18:30 Discussion with PhD. Students

Moderator: Dr. R. Orus (ESTEC/ESA)

Dinner: Get together (on your own)

Thursday Jan 21st, 2016

Session 4: GNSS Applications

09:00-9:40 Setting up the Galileo Constellation

Dr. P. Ramos (ESOC/ESA, Germany)

09:40-10:20 ICGC services provisioning to scientific & professional communities

MSc. AM. Baron (Institut Cartogràfic Cat)

10:20-11:00 GNSS-R: Principles and 15 years of UPC contributions

Dr. A. Camps (UPC, Spain)

Conclusions and Farewell

11:30-13:30 **Academic Event: PhD Dissertation**

PhD Candidate: A. Rovira-Garcia (gAGE)

Cocktail

16:00-18:00 **Academic Event: PhD Dissertation**

PhD Candidate: H. Carreño Luengo (TSC)

Cocktail

