

Thursday, 18 February 2016

Venue: Main Conference Room - H3 Building, ground floor, University of Trieste,
P.le Europa 1, Italy – entrance P7

08:00 – 09:00 *On-site Registration*

09:00 – 11:10 Plenary Session

09:00 – 09:40 Welcome & Opening in Memory of Professor Giorgio Manconi

Local Trieste Authorities & University of Trieste Representatives

Dr. Maria Teresa Bassa Poropat, President, Province of Trieste

Prof. Giorgio Sulligoi, Deputy Rector - Industrial Relations and Community Affairs, Un. Trieste

Dr. Maria Pia Turinetti Di Priero, Managing director, University of Trieste

Prof. Paolo Rosato, Director, DIA, University of Trieste

Prof. Raffaella Cefalo, GeoSNav Lab, University of Trieste

09:40 – 11:10 Session 1

New Advanced GNSS and Geospatial Techniques – Applications to Geodetic Networks, Mapping and Air Traffic Management

Chair: Boyan STOPAR, *University of Ljubljana, Faculty of Civil and Geodetic Engineering, Slovenia*

Raffaella CEFALO, *GeoSNav Lab, University of Trieste, Italy*

Invited Presentations:

09:40 – 10:00

“Galileo and EGNOS: State of play”

prepared by Pieter De Smet, European Commission, DG GROWTH.

“Status for Galileo – Establishment, Services and Benefits for the Users”

prepared by Reinhard Blasi, Market Development, European GNSS Agency

10:00 – 10:20

“High Precision GNSS – prospects for science and applications”

Janusz B. Zieliński, Air Force Academy, Dęblin, Institute of Aeronavigation, Dęblin, Poland; **Agata Wielgosz**, Polish Academy of Sciences, Space Research Centre, Warsaw, Poland.

10:20 - 10:40

“Accuracy and Availability of the Real Time GNSS Geodetic Networks”

Cezary Specht, Department of Geodesy and Oceanography, Gdynia Maritime University, Faculty of Navigation, Gdynia, Poland.

10:40 - 11:00

“Geospatial Technology in Air Traffic Management - Validation of Real Time Airspace Status Information Exchange Process”

Alessandro Prestigiacomo, EUROCONTROL, Network Manager Directorate/Operations Planning Unit, Brussels, Belgium.

11:00 - 11:20

“Space, time and maps”

Tamara Bellone¹, **Luigi Mussio**², ¹DIATI, Polytechnic of Turin, Italy; ²DICA, Polytechnic of Milan, Italy.

11:20 – 11:50 *coffee break*

11:40 – 13:20 Session 2

New Advanced GNSS Techniques – Applications to Geodesy, Civil and Environmental Engineering

Chair: Fabio CROSILLA, *University of Udine, Italy*

Janusz B. ZIELIŃSKI, *Air Force Academy, Dęblin, Institute of Aeronavigation, Poland*

Invited Presentations:

- 11:50 - 12:10 **“GNSS data analysis at Politecnico di Milano for crustal deformation”**
Riccardo Barzaghi, **Barbara Betti**, DICA, Polytechnic of Milan, Italy.
- 12:10 - 12:30 **“The actual perspectives of GNSS multi-constellation services and receivers for kinematic applications”**
Raffaella Cefalo, GeoSNav Lab, Department of Engineering and Architecture, University of Trieste, Italy.
- 12:30 - 12:50 **“Precise Point Positioning for High Precision Geodetic Applications”**
Oskar Sterle, **Bojan Stopar**, Polona Pavlovčič Prešeren, University of Ljubljana, Faculty of Civil and Geodetic engineering, Slovenia.
- 12:50 - 13:10 **“Stability of the reference frame for structural monitoring”**
Maurizio Barbarella, **Stefano Gandolfi**, DICAM, University of Bologna, Italy.
- 13:10 - 13:30 **“GNSS related activities of the ICTP Telecommunication/ICT for Development Laboratory”**
S. M. Radicella, B. Nava, ICTP Telecommunication/ICT for Development Laboratory, Trieste, Italy.

13:30 – 14:30 *lunch*

14:30 – 16:10 Session 3

New Advanced GNSS Techniques – Applications to GNSS Networks, Ionosphere studies and Environmental Monitoring

Chair: Bruno NAVA, *ICTP Telecommunication/ICT for Development Laboratory, Italy*

Medzida MULIC, *Geodesy Department, University of Sarajevo, Bosnia and Herzegovina*

Invited Presentations:

- 14:30 – 14:45 **"Studies of Tectonic Movements in Saudi Arabia"**
Dr. F. Kartal, Dr. M. Al Rajhi, Prof. Dr. T. Uzel, Prof. **Dr. K. Eren**, Istanbul Kultur University, Istanbul, Turkey
- 14:50 – 15:05 **"Single-frequency receivers as master permanent stations in GNSS networks: precision and accuracy of the positioning in mixed networks"**
Paolo Dabove, Alberto Cina, **Ambrogio Maria Manzino**, DIATI, Politecnico di Torino, Turin, Italy.
- 15:10 – 15:25 **"Internet platform for improving the EGNOS ionospheric corrections"**
Anna Swiatek, Leszek Jaworski, Lukasz Tomasik, Space Research Centre, Polish Academy of Sciences, Warsaw, Poland.
- 15:30 – 15:45 **"Recovery of the spatial state of the ionosphere using regular definitions of the TEC identifier at the network of continuously operating GNSS stations of Ukraine"**
Yankiv-Vitkovska, Liubov, Institute of Geodesy, National University Lviv Polytechnic, Lviv, Ukraine.
- 15:50 – 16:05 **"TREGA Project: Towards a SBAS-EGNOS in Sub-Saharan Africa"**
X. Otero, C. Papparini, E. Abe and S. M. Radicella, ICTP Telecommunication/ICT for Development Laboratory, Trieste, Italy.
- 16:10 – 16:40 **coffee break**

16:40 – 18:10 Session 4

New Advanced GNSS Techniques & Receivers – Applications to Static and Kinematic Positioning and Timing

Chair: Sandro Maria RADICELLA, *Telecommunication/ICT for Development Laboratory, Italy*

- 16:40 – 16:55 **"Interoperability of the GNSS's for positioning and timing applications"**
Alessandro Caporali, Luca Nicolini, Mauro Bertocco, University of Padova, Italy.
- 17:00 – 17:15 **"GNSS Radio Occultation: an augmentation tool to improve Geodetic Surveying"**
Elisa Rosciano, **Francesco Vespe**, Italian Space Agency – Center of Spatial Geodesy, Matera, Italy.

- 17:20 – 17:35 **“25 years of GNSS Researches & Applications at the Department of Engineering and Architecture and at GeoNetLab, Centre of Excellence for the Research in TeleGeomatics and Spatial Informations, University of Trieste, Italy”**
R. Cefalo, A. Purga, T. Sluga, G. Skerl - GeoSNav Lab, University of Trieste (IT); G. Manzoni†, M. Manzoni, A. Purga, B. Sannino, P. Cefalo, G. Bolzon, E. Di Bernardo, M. Gasparini, G. Grandi, D. Inchingolo, A. Marassi, L.S. Rizzo, R.G. Rizzo, M. Barrancotto S. Bensi, S. Martinolli – GeoNetLab, University of Trieste and GeoNetLab consultants (IT); Stanislaw Oszczak, A. Ciecko – University of Warmia and Mazury, Olsztyn (PL); G. Caroti, A. Piemonte, DIC, University of Pisa (IT); A. Amodeo, B. Crisman, R. Roberti – Department of Engineering and Architecture, University of Trieste (IT); M. Calderan, C. Palermo – IUAV, Venice (IT); C. Montefusco – ENAV (IT); G. Berlasso, R. Schak, R. Pagurut, A. Battistoni, A. Sgambati – Friuli Venezia Giulia Region (IT); M. Iansig, A. Cociancich, M. Di Bartolomeo, F. Ferro, G. Montagner, M. Nicolaucig – degree/PhD at GeoSNav, University of Trieste (IT) ; S. Fonzari - Municipality of Trieste (IT); A. Benvenuti, A. Chiarandini – INSIEL (UD); S. Cirilli – DMG, University of Trieste (IT); R. Ravalli - Province of Trieste, Italy.
- 17:40 - 17:55 **“Making GNSS receivers robust against environmental influences”**
Guy Lemmens, Altus Septentrio.
- 18:00 - 18:05 Closing session & Remarks
- 19:30 - 21:00 **buffet dinner at Starhotels Savoia Excelsior Palace ******
Riva del Mandracchio, 4 TRIESTE

Friday, 19 February 2016

Venue: Main Conference Room - H3 Building, ground floor, University of Trieste,
P.le Europa 1, Italy – entrance P7

09:00 – 10:40 Session 5

New Advanced GNSS Techniques – Applications to Geodetic Networks and Environmental Protection

Chair: Biagio FORTE, *University of Bath, United Kingdom*

Cezary SPECHT, *Gdynia Maritime University, Faculty of Navigation, Gdynia, Poland*

- 09:00 – 09:15 **“Readjustment of the fundamental leveling network in NH-EVRF2007 European Vertical Reference Frame”**
Leszek Jaworski, Anna Swiatek, Space Research Centre Polish Academy of Sciences, Warsaw, Poland.
- 09:20 – 09:35 **“FRDNet: evolution of a permanent GNSS receiver system”**
David Zuliani, Paolo Fabris, Giuliana Rossi, OGS, Trieste, Italy.
- 09:40 – 09:55 **“Plate movement and karstic underground water flow on GNSS: lessons learned from fifty years of ultra broad band tilt observations in the Trieste Karst”**
Carla Braitenberg, Ildiko' Nagy, Mathematics and Geosciences Department, University of Trieste, Italy.
- 10:00 – 10:15 **“The NeQuick ionosphere electron density model: an overview on GNSS applications”**
B. Nava, S.M. Radicella, ICTP Telecommunication/ICT for Development Laboratory, Trieste, Italy.
- 10:20 – 10:35 **“VADASE: The GNSS revolution”**
Giovanni Abate, Francesco Matteuzzi, Giuliano Gallerini, Leica Geosystems S.p.A.
- 10:40 – 11:10 **coffee break**

11:10 – 13:10 Session 6

New Advanced GNSS Techniques – Applications to Outdoor and Indoor GNSS/INS Static and Kinematic Surveying

Chair: Janusz B. ZIELIŃSKI, *Air Force Academy, Dęblin, Institute of Aeronavigation, Poland*
Raffaella CEFALO, *GeoSNav Lab, University of Trieste, Italy*

- 11:10 – 11:25 **“Odometry and low-cost sensor fusion in TMM Dataset”**
Ambrogio Maria Manzino, Cinzia Taglioretti, Politecnico di Torino, Italy.
- 11:30 – 11:45 **“Improving high-rate structures and ground monitoring through GNSS-MEMS accelerometer solutions integration”**
Elisa Benedetti¹, Athanasios Dermanis², **Mattia Crespi**¹, ¹Geodesy and Geomatics Division - Department of Civil, Constructional and Environmental Engineering, Sapienza University of Rome, Italy; ²Department of Geodesy and Surveying, School of Rural and Surveying Engineering, Faculty of Engineering, The Aristotle University of Thessaloniki, Greece.
- 11:50 – 12:05 **“A simple integration of a mobile device in a Beacon environment”**
Ciro Palermo, Mauro Calderan, Marina Migliorini, IUAV, Venezia, Italy.

- 12:10 – 12:25 **“GNSS/INS positioning for mobile mapping: analysis and performances in critical situations”**
Alberto Cina, Iosif Horea Bendea, Paolo Dabove, Ambrogio Maria Manzino, Marco Piras, Cinzia Taglioretti, DIATI, Polytechnic of Turin, Turin, Italy.
- 12:30 – 12:45 **“Outdoor and Indoor navigation with Microsoft Kinect”**
Diana Pagliari, **Livio Pinto**, DICA, Polytechnic of Milan, Italy.
- 12:50 – 13:05 **“SPARTACUS: positioning solutions for critical asset tracking and crisis management”**
Luca Vittuari, Matteo Zanzi, Antonio Ghetti, DICAM, University of Bologna, Italy; DIE - University of Bologna, Forlì, Italy.
- 13:10 – 14:30 **lunch**

14:30 – 18:00 Session 7

New Advanced 3D Spatial Techniques – Photogrammetry, Remote Sensing, Laser Scanning, GIS, WebGIS and UAVs

14:30 – 15:50 Session 7a

New Advanced 3D Spatial Techniques – Photogrammetry

Chair: Liubov YANKIV-VITKOVSKA, *Institute of Geodesy, National University Lviv Polytechnic, Lviv, Ukraine* and Raffaella CEFALO, *GeoSNav Lab, University of Trieste, Italy*

Invited Presentations:

- 14:30 – 14:50 **“Procrustean photogrammetry: From Exterior Orientation to Bundle Adjustment”**
Andrea Fusiello, **Fabio Crosilla**, Eleonora Maset, University of Udine, Italy.
- 14:50 – 15:10 **“Some documentations of Cultural Heritage in Poland by Spherical Photogrammetry”**
Gabriele Fangi, Polytechnic University of Marche, Ancona, Italy.

Technical Presentations:

- 15:10 – 15:25 **“Evaluation of the accuracy of 3D point determination from stereo-pairsv”**
Marco Scaioni, Xuan Zhang, Politecnico di Milano, Italy; Tongji University, Shanghai, P.R. China.
- 15:30 – 15:45 **“Fast field survey with a smartphone”**
Andrea Masiero, Francesca Fissore, Francesco Pirotti, Alberto Guarnieri,

Antonio Vettore, Interdepartmental Research Center of Geomatics (CIRGEO),
University of Padova, Italy.

15:50 – 16:20 **coffee break**

16:20 – 17:20 Session 7b

New Advanced 3D Spatial Techniques – Remote Sensing

Chair: Eufemia TARANTINO, *Polytechnic of Bari, Italy*
Marco SCAIONI, *Polytechnic of Milan, Italy*

16:20 – 16:35 **“Extreme miniaturization of remote sensing satellites: the experience of POPSAT and ATHENOXAT”**
Giulio Manzoni, Yesie L. Brama, Meini Zhang, Naushad Rahman, Microspace Rapid Pte Ltd, Singapore.

16:40 – 16:55 **“Doing science with nano-satellites”**
Anna Gregorio, Mauro Messerotti, Alessandro Cuttin, Mario Fragiacomò,
University of Trieste & PicoSaTs, Trieste, Italy.

17:00 – 17:15 **“Shadow detection and removal in VHR RGB aerial images”**
Alessia Movia, Alberto Beinat, Thomas Sandri, University of Udine, Italy.

17:20 – 18:00 Session 7c

New Advanced 3D Spatial Techniques – Laser Scanning and 3D modeling

17:20 – 17:35 **“Laser scanning surveying and 3D modeling of the Aquileia Baptistery for structural analysis purposes”**
Domenico Visintini, Anna Spangher, University of Udine, Italy.

17:40 – 17:55 **“Palazzo Italia at Expo 2015: 3D integrated and almost real time surveying technologies applied to the positioning of the external concrete panel”**
Giorgio Paolo Maria Vassena, University of Brescia, Italy.

18:00 – 18:45 **Poster Session & Technical Exhibition** - Exhibition Area,
H3 Building ground floor (GNSS receivers, Laser Scanner, TPS,
UAVs Manufacturers).

Saturday, 20 February 2016

Venue: Main Conference Room - H3 Building, ground floor, University of Trieste,
P.le Europa 1, Italy – entrance P7

09:00 – 11:00 Session 8

**New Advanced GNSS Techniques – Cultural Heritage, GIS, Web GIS
and UAVs**

Chair: Domenico SGUERSO *Laboratory of Geodesy, Geomatics and GIS, University of Genoa, Italy,*
Raffaella CEFALO, *GeoSNav Lab, University of Trieste, Italy*

- 09:00 – 09:15 **“Project for a GNSS Widespread Territorial Park”**
Franco C. Grossi - Франко К. Гросси, Kazan State University of Architecture
and Engineering, Republic of Tatarstan, Russian Federation.
- 09:20 – 09:35 **“Kinematic Positioning: from Mobile Mapping Systems to Unmanned
Aerial Vehicle”**
Gabriella Caroti, **Andrea Piemonte**, A.S.T.R.O. Laboratory, Civil and Industrial
Engineering Department, Pisa University, Italy.
- 09:40 – 09:55 **“Applications of Digital Photogrammetry from UAVs integrated by
terrestrial Laser Scanning to Disaster Management - Brcko flooding Case
Study (Bosnia and Hertzegovina)”**
F. Cescutti¹, F. Coren², A. Pavan², R. Cefalo³, A. Calliari³, ¹Department of
Engineering and Architecture, University of Trieste, Italy, ²Istituto Nazionale
di Oceanografia e di Geofisica Sperimentale (OGS) Trieste, Italy, ³GeoSNav
Laboratory, University of Trieste, Italy.
- 10:00 – 10:15 **“Wavelet neural network application in function approximation”**
Polona Pavlovčič Prešeren, Bojan Stopar, Oskar Sterle, University of
Ljubljana Faculty of Civil and Geodetic engineering, Slovenia.
- 10:20 – 10:35 **“Implementing an OGC Web Processing Service in a WebGIS Framework to
analyze satellite data”**
Grazia Caradonna, Antonio Novelli, **Eufemia Tarantino**, Benedetto Figorito,
Umberto Fratino, Politecnico di Bari, Italy; ARPA Puglia, Italy.
- 10:40 – 10:55 **“Geography of WWI sites along the Italian front by means of GIS tools”**
Paolo Plini, Giuliano Fontinovo, Sabina Di Franco, Rosamaria Salvatori,
National Research Council of Italy, Institute for Atmospheric Pollution
Research, Rome, Italy.

11:00 – 11:15 **“Optimization of a cogenerative biomass plant location using *open source* GIS Techniques. Technical, Economical and Environmental validation methodology”**
A. Tommasi¹, R. Cefalo¹, A. Grazioli², D. Pozzetto², Y. M. Alvarez Serrano³, M. Zuliani⁴; ¹GeoSNav Laboratory, University of Trieste, Italy; ²Department of Engineering and Architecture, University of Trieste, Italy; ³Department of Electronical, Mechanical and Management, University of Udine, Italy; ⁴Comunità Montana della Carnia, Italy.

11:20 – 11:50 **coffee break**

11:50 – 14:00 Session 9

New Advanced GNSS and 3D Spatial Techniques applied to Disaster Management

Chair: Franco GROSSI, *Kazan State University of Architecture and Engineering, Republic of Tatarstan, Russian Federation* and Bruno NAVA, *ICTP Telecommunication/ICT for Development Laboratory, Italy*

- 11:50 – 12:05 **“Artificial Adaptative Systems to the monitoring of the extremely-slow landslide”**
D. Dominici, V. Massimi, **M. Alicandro**, DICEAA – Department of Civil, Construction - Architectural and Environmental Engineering, University of L’Aquila, L’Aquila, Italy.
- 12:10 – 12:25 **“GNSS TEC anomalies as a precursor of the earthquake”**
Medzida Mulic, University of Sarajevo, Faculty of Civil Engineering, Geodesy Department, Sarajevo, Bosnia and Herzegovina.
- 12:30 – 12:45 **“Analysis of the GNSS Data Recorded at the Everest Pyramid Lab during the 2015 Nepal Earthquake”**
Giorgio Poretti, Federico Morsut, Franco Pettenati, Department of Mathematics and Geosciences, University of Trieste; OGS – Istituto di Oceanografia e Geofisica Sperimentale, Sgonico, Trieste, Italy.
- 12:50 – 13:05 **“Recent developments towards the extension of EGNOS into Africa – The FP7 MISW project”**
B. Forte, F. Da Dalt, T. Panicciari, C. Mitchell – University of Bath (UK); N. Wilhelm, D Serant – Thales Alenia Space France; A. Zin, L. Marradi, R. Muscinelli, R. Fiordiponti – Thales Alenia Space Italy; V. Sreeja, M. Aquino – University of Nottingham (UK); F. Dosis – Politecnico di Torino (Italy); L. Alfonsi, L. Spogli, G. De Franceschi – Istituto Nazionale di Geofisica e Vulcanologia (Italy); I. Häggström, C.-F. Enell – EISCAT (Sweden); P. Chawdhry – European Joint Research Centre, Institute for Security and Protection of Citizens (Belgium); P. Høeg, H.-H. von Benzon – Danish

Technological University - Space (Denmark); M. Pozoga – Space Research Centre (Poland); T. Kos – University of Zagreb (Croatia); E. Henley, D. Jackson – Met Office (UK).

13:10 – 13:25 **“Comparison between PPP and DD processing techniques using Bernese 5.2 – Computation of displacements and velocities of Marussi FVG and FredNet GNSS networks and visualization on GeoServer: first results”**
Federico Morsut¹, **R. Cefalo**², ¹Department of Mathematics and Geosciences, University of Trieste, Italy; ²GeoSNav Laboratory, Department of Engineering and Architecture, University of Trieste, Italy.

13:30 – 13:45 **“Advances in the investigation and monitoring of rock cliffs and glaciers with Terrestrial Laser during the last decade. An overview”**
Andrea Tamburini, IMAGEO Srl, Torino, Italy.

13:50 – 14:00 **Workshop Conclusions & Remarks.**

14:00 – 15:00 **lunch**

15:30 – 17:30 **Cultural guided visits, Trieste city center.**

Poster Session

“Monitoring of the Italian GNSS Geodetic Reference Frame”

Maurizio Barbarella, **Stefano Gandolfi**, Luca Tavasci, DICAM – ARCES – University of Bologna, Italy.

“Monitoring and geodata analysis for community's support”

Bianca Federici¹, Tiziano Cosso², Ilaria Ferrando¹, **Domenico Sguerso**¹; ¹ Laboratory of Geodesy, Geomatics and GIS, DICCA - Department of Civil, Chemical and Environmental Engineering, Polytechnic School – Engineering, University of Genoa, Italy; ²Gter srl Innovazione in Geomatica, Gns e Gis, Spin off of the University of Genoa, Italy.

“EGNOS related Activities at GeoSNav Lab, University of Trieste”

Mauro Calderan¹, **Raffaella Cefalo**¹, Adam Ciecko², Stanislaw Oszczak², **Tatiana Sluga**¹, GeoSNav Lab, Department of Engineering and Architecture, University of Trieste, Italy; University of Warmia and Mazury, Olsztyn, Poland.

“EGNOS and GIS/WebGIS techniques applied to Air Space Management and Control”

Raffaella Cefalo¹, Cristoforo Montefusco², **Alessio Purga**¹, GeoSNav Lab, Department of Engineering and Architecture, University of Trieste, Italy; ²ENAV, Rome, Italy.

“Experiences of UAV Surveys applied to the Cultural Heritage and Environmental Risk Management”

Mauro Caprioli¹, **Rosamaria Trizzino**², ¹DICATECh, Politecnico di Bari, Bari, Italy; ²CNR – IRPI, Bari, Italy.

“Monitoring of highway structure 3D deformation caused by landslides”

Medzida Mulic, University of Sarajevo, Faculty of Civil Engineering, Geodesy Department, Sarajevo, Bosnia and Herzegovina.

“Use of NeQuick 2 model for real-time ionospheric correction in single frequency GNSS positioning: an assessment study”

A. Kashcheyev, B. Nava, Y. O. Migoya Orue', S.M. Radicella, ICTP Telecommunication/ICT for Development Laboratory Trieste, Italy.

“Challenges and solutions of estimating low-latitude ionisation gradients in the case of EGNOS”

F. Da Dalt, T. Paniciari, C. Mitchell, **B. Forte** – University of Bath (UK); N. Wilhelm, D Serant – Thales Alenia Space France; A. Zin, L. Marradi – Thales Alenia Space Italy.

“Impact of Ionospheric scintillation on the performance of a network of EGNOS-like monitoring stations”

B. Forte, T. Pinto Jayawardena, T. Paniciari, F. Da Dalt C. Mitchell – University of Bath (UK); N. Wilhelm, D Serant – Thales Alenia Space France; A. Zin, L. Marradi – Thales Alenia Space Italy; L. Alfonsi, L. Spogli, G. De Franceschi – Istituto Nazionale di Geofisica e Vulcanologia (Italy).

“Accelerometric measurements to assess horse welfare”

Noemi Emanuela Cazzaniga¹, Joana Nery², Domenico Bergero², **Marco Scaioni**³, Alberta Albertella¹;
¹Dip. Ingegneria Civile e Ambientale, Politecnico di Milano; ²Dip. Scienze Veterinarie, Università degli Studi di Torino; ³Dip. di Architettura, Ingegneria delle Costruzioni e Ambiente Costruito, Politecnico di Milano, Italy.

“Cross border cooperation in Adriatic and Western Balkan area for a common *Territorial Information System* in the frame of European Territorial Cooperation”

Paola Cefalo¹, Massimiliano Angelotti², ¹Consultant Engineer, Trieste, Italy; ²Project Manager at Central Directorate for infrastructure and territory in Autonomous Region of Friuli Venezia Giulia, Trieste, Italy.

“An integrated approach of GNSS and GIS for monitoring of land use”

Shalu Soni, P.C. Moharana; Polytechnic of Turin, Italy.