2nd International Conference and Exhibition on

Satellite & Space Missions

July 21-23, 2016  Berlin, Germany

Scientific Program
### Keynote Forum

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<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Speaker</th>
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<tr>
<td>09:00-09:05</td>
<td>Introduction</td>
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<tr>
<td>09:05-09:30</td>
<td>Title: Revolution of space technology, new idea how we can speed up time travel to planets by using electromagnetic field in space</td>
<td>Capt. Abdullah Al Zahrani, Alzahrani Space Innovation, Poland</td>
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<tr>
<td>09:30-09:55</td>
<td>Title: Flexible description of earth observation data processing</td>
<td>Dorian Gorgan, Technical University of Cluj-Napoca, Romania</td>
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<tr>
<td>09:55-10:20</td>
<td>Title: Human long duration space missions: Space dentistry, medicine and space policy</td>
<td>Balwant Rai, Kepler Space Institute, USA</td>
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### Sessions:

**Space Missions | Space Exploration | Earthquake Engineering | Types of Satellites and Applications | Aerospace Engineering and Technology | Applications of Satellite Technology | Climate change and Weather forecasting**

Session Chair: Dorian Gorgan, Technical University of Cluj-Napoca, Romania  
Session Co-Chair: Joseph Seckbach, The Hebrew University of Jerusalem, Israel

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<tr>
<td>10:35-10:55</td>
<td>Title: Current issues in Space Situational Awareness (SSA) and Space Traffic Management (STM)</td>
<td>Mark A Skinner, The Boeing Company, USA</td>
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<tr>
<td>10:55-11:15</td>
<td>Title: Space simulated missions and space research: Human health</td>
<td>Balwant Rai, Kepler Space Institute, USA</td>
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<tr>
<td>11:15-11:35</td>
<td>Title: Geodetic earthquake forecasting and crustal deformation modeling from point position</td>
<td>Yüksel Altiner, Federal Agency for Cartography and Geodesy in Frankfurt am Main, Germany</td>
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<tr>
<td>11:35-11:55</td>
<td>Title: Characteristics of hypervelocity impact of micro-particles on multi-foils shield configurations</td>
<td>Sunil C Joshi, Nanyang Technological University, Singapore</td>
</tr>
<tr>
<td>11:55-12:15</td>
<td>Title: Implementation of a micro-satellite program in the infrastructure of the Russian segment of the International Space Station</td>
<td>Stanislav I Klimov, Russian Academy of Sciences (IKI RAS), Russia</td>
</tr>
<tr>
<td>12:15-12:35</td>
<td>Title: Analytical method for space debris propagation under perturbations in the geostationary ring</td>
<td>Daniel Casanova Ortega, University of Zaragoza, Spain</td>
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<tr>
<td>12:35-12:55</td>
<td>Title: Dealing with the Earth’s ionosphere’s complexity</td>
<td>Massimo Materassi, Institute for Complex Systems of the National Research Council, Italy</td>
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#### Lunch Break 12:55-13:35 @ Element I+II Restaurant

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<tr>
<td>13:35-13:55</td>
<td>Title: PC index as a ground-based proxy of the solar wind energy incoming into the magnetosphere: Means for space weather monitoring</td>
<td>Oleg Troshichev, Arctic and Antarctic Research Institute, Russia</td>
</tr>
<tr>
<td>13:55-14:15</td>
<td>Title: Joint viterbi detector/decoder for satellite communications</td>
<td>Chan Kheong Sann, Data Storage Institute (DSI), Singapore</td>
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<tr>
<td>14:15-14:35</td>
<td>Title: From extremophilic microbes to extraterrestrial possibilities of life</td>
<td>Joseph Seckbach, The Hebrew University of Jerusalem, Israel</td>
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<td>14:35-14:55</td>
<td>Title: How to talk about Einstein's general theory of relativity?</td>
<td>Oyvind G Gron, Oslo and Akershus University, Norway</td>
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<tr>
<td>14:55-15:15</td>
<td>Title: Analysis of launch opportunity for low-thrust interplanetary missions</td>
<td>Maffione Porzia Federica, Politecnico di Torino, Italy</td>
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15:30-15:50
Title: Electrochemical behavior in acidic medium of Al–2.0 wt. %Fe aerospace alloy treated by laser surface remelting
Moisés Meza Pariona, State University of Ponta Grossa, Brazil

15:50-16:10
Title: Analysis of (soft) soil parameter uncertainty in planetary rover mobility simulations
Alberto Gallina, AGH University of Science and Technology, Poland

16:10-16:30
Title: Services for space missions support within the ESA space situational awareness space weather service network
Erwin De Donder, Royal Belgian Institute for Space Aeronomy, Belgium

16:30-16:50
Title: Monitor and study horizontal and vertical changes at land surface using remote sensing and GIS technology
Mohamed Mhmod, Jilin University, China

16:50-17:10
Title: Development of the statistical theory of forming cosmogonical bodies to explain a stability of the orbital movements of planets and the forms of planetary orbits
Alexander M Krot, United Institute of Informatics Problems of National Academy of Sciences, Belarus

17:25-17:45
Title: Geospatial approaches for micro level farm planning - A step to enhance crop productivity
Sathish Ayyappa, University of Agricultural Sciences, India

17:45-18:05
Title: Space-based solar laser system simulation to transfer power onto the Earth
Yasser A Abdel-Hadi, National Research Institute of Astronomy and Geophysics (NRIAG), Egypt

18:05-18:25
Title: Design and realization of payload operation and application ground system of China’s space
Hongfei Wang, Chinese Academy of Sciences, China

18:25-18:45
Title: Major crops classification using time series MODIS EVI with adjacent years of ground reference data in the US state of Kansas
Muhammad Shakir, University of Chinese Academy of Sciences, China

Panel Discussion

Day 2
July 22, 2016

Experience I+II

Keynote Forum

09:00-09:05
Introduction

09:05-09:30
Title: New perspectives of combined data sets for environmental information
Barbara Koch, Albert-Ludwigs University of Freiburg, Germany

09:30-09:55
Title: Celebrating the centenary of the Schwarzschild solutions and Einstein’s prediction of gravitational waves and their detection by LIGO
Oyvind G Gron, Oslo and Akershus University, Norway

09:55-10:20
Title: History and modernity of the study of space weather in Russia
Stanislav I Klimov, Institut Kosmicheskikh Issledovanyi - RAS, Russia

Networking & Refreshments 10:20-10:35 @ Main Lobby

Sessions:

Session Chair: Barbara Koch, Albert-Ludwigs University of Freiburg, Germany
Session Co-Chair: Nicolas H Younan, Mississippi State University, USA

Session Introduction

10:35-10:55
Title: ISEE III reboot project or how to save an interplanetary spacecraft on a shoestring budget
Dennis Wingo, Skycorp Incorporated, USA

10:55-11:15
Title: Information retrieval from Earth Observation (EO) imagery
Nicolas H Younan, Mississippi State University, USA

11:15-11:35
Title: Potential of different sensor combination approaches for the estimation of above ground biomass
Barbara Koch, Albert-Ludwigs University of Freiburg, Germany

11:35-11:55
Title: New methods for remote sensing of altitude profiles of the O(1P), O3 and CO2 in the daytime mesosphere and lower thermosphere
Valentine A Yankovsky, St. Petersburg State University, Russia
Title: Orbital dynamics of a solar sail accelerated by thermal desorption of coatings
Elena Ancona & Roman Ya Kezerashvili, Polytechnic University of Turin, Italy/The City University of New York, USA

Title: Cloud detection in the sun area of total sky images using a conventional and a low-cost sky camera
Joaquín Alonso Montesinos, University of Almería, Spain

Title: From space to Earth: the GPR frontiers
Pier Matteo Barone, The American University of Rome, Italy

Lunch Break 12:55-13:30 @ Element I+II Restaurant

Title: The theory of solar zenith – Proposed new rules for the seasons of year in intertropical locations focusing Salvador Bahia
Luiz Sampaio Athayde Junior, UFBA-Federal University from Bahia, Brazil

Title: Synoptical monitoring of climatic thermic fronts on the surface of the Southern Ocean by means of satellite remote sensing and in situ measurements
Víctor V Ionov, St. Petersburg State University, Russia

Title: Using multispectral and hyperspectral satellite imagery in ecological and geographical studies
Mikhail Yu. Puzachenko, Institute of Geography RAS, Russia

Title: Impervious surface detection using very high spatial resolution satellite data
Ebrahim Taherzadeh Mobarakhe, Ground Data Solutions R&D Sdn Bhd, Malaysia

Title: Enhanced chemical vapor sensing by single-stranded DNA-graphene
Seong Chan Jun, Yonsei University, Korea

Networking & Refreshments 15:10-15:30 @ Main Lobby

Poster Presentations 15:10-15:45

Title: The evaluation of solar farm locations applying geographic information system and multi-criteria decision-making methods: Case study in Southern Morocco
Meryem Tahri, University Hassan II, Morocco

Title: Unveiling the first high resolution satellite mosaic coverage of Botswana’s Okavango Delta
Hamisai Hamandawana, University of Fort Hare, South Africa

Title: Changing paradigm in satellite design, development and assembly with 3D printing
Sunil C Joshi, Nanyang Technological University, Singapore

Networking & Refreshments 16:30-16:40 @ Main Lobby

Title: WorDeL Language – Tutorial on flexible description of Earth observation data processing
Dorian Gorgan, Victor Bacu, Constantin Nandra, Technical University of Cluj-Napoca, Romania

Title: Detecting coastline changes using GIS and remote sensing, a case study from Oman
Lotfy Kamal Azaz, Menofya University, Egypt

Panel Discussion
Award Ceremony

Day 3 July 23, 2016
Extended Networking Session