**Programme for Research-Development-Innovation on Space Technology and Advanced Research - STAR**

## *STAR Programme Annual Conference*
### *26-27 June 2013*
### National Institute for Aerospace Research "Elie Carafoli" - INCAS
### 220, Iuliu Maniu Blvd., District 6, Bucharest, Romania

# Draft Agenda

## Wednesday, 26 June

| Time | Topic | Code | Institution |
|---|---|---|---|
| 08:30-09:00 | **Registration and Welcome coffee** | | |
| 09:00-09:10 | ***Opening session*** | | ***Romanian Space Agency (ROSA)*** |
| 09:10-09:20 | National strategy for space and related fields | | S.C. IAROM S.A., Bucharest |
| 09:20-09:30 | Participation to the scientific ESA Programmes | | Institute of Atomic Physics (IFA) |
| 09:30-09:40 | Scientific, Technical and Legal Support for Romania's Participation in ESA Committees on Earth Observation, Satellite Navigation and Communication Satellite | | University of Agronomic Science and Veterinary Medicine - Bucharest |
| 09:40-09:50 | STAR Technology | | National Institute for Aerospace Research "Elie Carafoli" (INCAS S.A.) |
| 09:50-10:00 | STAR - Knowledge Management Infrastructure | | Imtech ICT Romania |
| 10:00-10:10 | Correlational Study of Space Missions Related to Fundamental Physics. Opportunities for Romanian Space Projects | COSMOS-RO | National Institute for Laser, Plasma and Radiation Physics - Institute of Space Science (INFLPR-ISS) |
| 10:10-10:20 | Cluster Flux Gate Magnetometer Daily Calibration and Scientific Data Exploitation | TUNED | National Institute for Laser, Plasma and Radiation Physics - Institute of Space Science (INFLPR-ISS) |
| 10:20-10:30 | Radio Dichotomy in Active Galactic Nuclei and Black Hole X-ray Binaries | RDAGN | National Institute for Laser, Plasma and Radiation Physics - Institute of Space Science (INFLPR-ISS) |
| 10:30-10:40 | Auroral Electrodynamics with Swarm | ALEOS | National Institute for Laser, Plasma and Radiation Physics - Institute of Space Science (INFLPR-ISS) |
| 10:40-10:50 | Contributions to the Euclid Mission | CEM | National Institute for Laser, Plasma and Radiation Physics - Institute of Space Science (INFLPR-ISS) |
| 10:50:11:00 | Satellite detection of faint fluorescence phenomena | SADET | National Institute for Laser, Plasma and Radiation Physics - Institute of Space Science (INFLPR-ISS) |
| 11:00-11:10 | Software development and integration for access to large-scale atomic databases and analysis applications | DATOM | National Institute for Laser, Plasma and Radiation Physics (INFLPR) |
| 11:10-11:20 | GPU in GRID for space science and technology | GUIDE | National Institute for Laser, Plasma and Radiation Physics - Institute of Space Science (INFLPR-ISS) |
| 11:20-11:30 | Validation of Swarm L-1b data using multi-point gradient estimation techniques | VALS | National Institute for Laser, Plasma and Radiation Physics - Institute of Space Science (INFLPR-ISS) |

| Time | Title | Acronym | Institution |
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| 11:30-11:40 | Clouds and Cloud Shadows Extraction Plug-In | CLOPI | S.C. Advanced Studies and Research Center S.R.L. |
| 11:40-11:50 | Bistatic SAR Demonstrator for PS Interferometry using a Fixed-Receiver Configuration | BISTATIC PSI | University "POLITEHNICA" of Bucharest - Research Centre for Space Information (CEOSpaceTech) |
| 11:50:12:00 | Development and validation of PSInSAR processing chain for certification as Operational Service Provider | PSInSAR | S.C. Advanced Studies and Research Center S.R.L. |
| **12:00-12:30** | *Lunch break* | | |
| 12:30-12:40 | Content Based Query Concept for Exploration and Discovery of Information in Earth Observation and Medical Libraries | CONCEDE | University "POLITEHNICA" of Bucharest - Research Centre for Space Information (CEOSpaceTech) |
| 12:40-12:50 | Clouds and Aerosols Profiling in support of ESA's Sentinel 4 and 5 missions | CAPESA | National Institute for Research and Development in Optoelectronics - INOE 2000 |
| 12:50:13:00 | Drought monitoring based on space and in-situ data | DROMOSIS | S.C. Advanced Studies and Research Center S.R.L. |
| 13:00-13:10 | Integrated landslide detection system using ground and space-borne monitoring techniques in Romania | ILUSTRO | Technical University of Civil Engineering Bucharest |
| 13:10-13:20 | Satellite Images Analysis for Fire Monitoring | SIAFIM | S.C. Intergraph Computer Services S.R.L. |
| 13:20-13:30 | RESEARCH FOR DEVELOPMENT A TELEMEDICINE EXPERT SYSTEM FOR PROVIDING OPTIMAL MEDICAL ON SITE RESPONSE IN DISASTERS AND EMERGENCY SITUATIONS MANAGEMENT (using the latest technology in biosenzors, satellite communications, satellite navigations, IT etc.) | TELEDIM | S.C. IAROM S.A., Bucharest |
| 13:30-13:40 | ADVANCED MONITORING SYSTEM OF URBAN VEGETATION DYNAMICS AND PREDICTIVE ASSESSMENT OF CLIMATIC AND ANTHROPOGENIC STRESSORS IMPACTS ON BUCHAREST METROPOLITAN AREA FROM SATELLITE AND IN-SITU BIOGEOPHYSICAL DATA | BUGREEN | National Institute for Research and Development in Optoelectronics - INOE 2000 |
| 13:40-13:50 | Advanced X-Ray Imaging System for AeroSpace Components Structural Integrity Investigation | DualXScan | S.C. ACCENT PRO 2000 S.R.L. |
| 13:50:14:00 | Experimental Weak Radio Signals Monitor for Ionospheric Disturbances Analysis | RAMA | BITNET - Research Center on Sensors & Systems (BITNET-CCSS) |
| 14:00-14:10 | Long term data exploitation for Satellite Image Time Series - Extraction of Classes for Scene Dynamics | LEO-SITS | University "POLITEHNICA" of Bucharest |
| 14:10-14:20 | Suborbital Launcher for Testing, Unconventional Subsystems Development | SLT-USD | University "POLITEHNICA" of Bucharest - Research Center for Aeronautics and Space (UPB-CCAS) |
| 14:20-14:30 | Technologies for Testing and Validation of the Structure, and Modified Hybrid Rocket Motor for Suborbital Launcher - STRAC | STRAC | University "POLITEHNICA" of Bucharest - Research Center for Aeronautics and Space (UPB-CCAS) |

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| 14:30-14:40 | Advanced strategic planning to develop a turbopump system for a liquid propellant rocket engine | DevPump | Romanian Research and Development Institute for Gas Turbines (COMOTI) |
| 14:40-14:50 | Low Altitude Launching Systems: Analysis and Tests of Atmospheric Flight Phases | LALAFP | National Institute for Aerospace Research "Elie Carafoli" (INCAS S.A.) |
| 14:50:15:00 | Inverse aero-thermodynamic analysis for supersonic/hypersonic flows | IATASH | University "POLITEHNICA" of Bucharest - Research Center for Aeronautics and Space (UPB-CCAS) |

## Thursday, 27 June

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| **09:00-09:30** | **Welcome coffee** |

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| 09:30-09:40 | Compositional and dynamical modeling of near-Earth asteroids | COD-NEA | Astronomical Institute of Romanian Academy |
| 09:40-09:50 | Subsystems for Nanosatellites - SuNs | SuNs | National Institute for Laser, Plasma and Radiation Physics - Institute of Space Science (INFLPR-ISS) |
| 09:50-10:00 | Romanian Dual CubeSat Mission. Development of the RoBiSat-1 spacecraft | RoBiSat-1 | National Institute for Laser, Plasma and Radiation Physics - Institute of Space Science (INFLPR-ISS) |
| 10:00-10:10 | ADvanced COmposite Structure for SPacecraft Applications | ADCOSSPA | Romanian Research and Development Institute for Gas Turbines (COMOTI) |
| 10:10-10:20 | Structural health monitoring in spacecraft structures using piezoelectric wafer active sensors and multimodal guided waves | Space SHM | National Institute for Aerospace Research "Elie Carafoli" (INCAS S.A.) |
| 10:20-10:30 | New Haptic Arm Exoskeletons for Robotics and Automation in Space | EXORAS | Technical University of Cluj-Napoca |
| 10:30-10:40 | Thin film photodetectors - new concepts and studies for aerospace applications | CONDAS | National Institute for Research and Development in Microtechnologies (IMT Bucharest) |
| 10:40-10:50 | Research Project on the Development of an Original Fuel Cell Technology Dedicated to Long-Distance Outer Space Manned Missions | FCtoOutSpace | S.C. ET Innovative Solutions S.R.L. |
| 10:50:11:00 | Compressive THz Imaging and Hadamard Spectroscopy for Space Applications | THh Imaging | National Institute for Laser, Plasma and Radiation Physics (INFLPR) |
| 11:00-11:10 | Distributed Coding Algorithms for Energy Saving in Wireless Sensor Networks Applications | DCA-WSN | University "POLITEHNICA" of Bucharest |
| 11:10-11:20 | Dynamic Launching and Recovery Procedures from High Altitudes | DYLARPHA | National Institute for Aerospace Research "Elie Carafoli" (INCAS S.A.) |
| 11:20-11:30 | Visual Based On-board Absolute Navigation Experiment | VISONE | S.C. GMV INNOVATING SOLUTIONS S.R.L. |

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| 11:30-11:40 | Integrated Evaluation System for Advanced Multilayered Materials in Aerospace and Related Fields | ATLAS | National Institute of Materials Physics (INFM) |
| 11:40-11:50 | High efficiency thermoelectrIc generator with non-steady state operation | TEGSPACE | S.C. ICPE S.A. |
| 11:50:12:00 | High-precision micro and nano smart sensors for space inertial navigation applications | SMARTSENSE | University of Craiova |
| **12:00-12:30** | **Lunch break** | | |
| 12:30-12:40 | Reliability design of RF-MEMS switches for space applications | REDEMS | Technical University of Cluj-Napoca |
| 12:40-12:50 | Bolometers for space applications in middle and long infrared | BOLOSPACE | National Institute for Research and Development in Microtechnologies (IMT Bucharest) |
| 12:50:13:00 | HYPERSPECTRAL IMAGE FEATURE EXTRACTION TOOLS | HIFET | National Institute for Aerospace Research "Elie Carafoli" (INCAS S.A.) |
| 13:00-13:10 | ACTIVE MICRO-SHIELDS SISTEMS FOR PROTECTION OF SPACE INFRASTRUCTURES | MICRO-SHIELDS | S.C. European Business Innovation & Research Center S.A. |
| 13:10-13:20 | ADVANCED ELECTROMAGNETIC EMISSIONS SECURITY SYSTEM FOR EARTH SATELLITE STATION NETWORKS DATA PROTECTION | SPEC | Military Equipment and Technologies Research Agency |
| **13:20-14:00** | **Questions and Answers**<br>**Closing session** | | |