

**SESSION 1: A - Nanosat Programs (Wednesday 09th - 11.30) Chairman: Prof. Enrico C. Lorenzini**

- |   |                                   |   |
|---|-----------------------------------|---|
| 1 | Andris Slavinskis                 | THE ESTONIAN STUDENT SATELLITE PROGRAMME: PROVIDING SKILLS FOR THE MODERN ENGINEERING LABOUR MARKET |
| 2 | Raffaele Mozzillo - Loris Franchi | CUBESAT TEAM OF POLITECNICO DI TORINO: PAST, PRESENT AND FUTURE PROJECTS                            |
| 3 | Rasmus Gundorff Sæderup           | AAUSAT5 - AN EVALUATION OF A STUDENT-RUN CUBESAT PROJECT  |
| 4 | Ignacio Barrios Tascón            | QBITO DEVELOPMENT AND STUDENTS INVOLVEMENT  |
| 5 | Marcello Valdatta                 | ELEONORA: A INTERNATIONAL SATELLITE PROJECT FOE THE CANADIAN SATELLITE DESIGN CHALLENGE             |
| 6 | Aleksander Lidtke                 | ENHANCING SPACEFLIGHT SAFETY WITH UOS3 CUBESAT  |

**SESSION 2: G - Test Platforms & Facilities (Wednesday 09th - 17.30) Chairman: Dr. Francesco Sansone – Dr. Livia Savioli**

- |   |                     |   |
|---|---------------------|---|
| 1 | Mattia Mazzucato    | DEVELOPMENT OF A GROUND-BASED COOPERATING SPACECRAFT TESTBED FOR RESEARCH AND EDUCATION   |
| 2 | Sebastiano Chiodini | MORPHEUS: A FIELD ROBOTICS TESTBED FOR SOIL SAMPLING AND AUTONOMOUS NAVIGATION  |
| 3 | Lennart Kryza       | DEVELOPING TECHNOLOGIES FOR SPACE ON A TERRESTRIAL SYSTEM: A COST EFFECTIVE APPROACH FOR PLANETARY ROBOTICS RESEARCH                        |
| 4 | Bence Góczán        | BALLOON PLATFORM FOR HIGH ALTITUDE RESEARCH   |
| 5 | Marco Barbetta      | ARCADE EXPERIMENT ON BOARD BEXUS 13 AND 17: DESIGN, INTEGRATION AND FLIGHT OF A TECHNOLOGY TEST PLATFORM WITHIN A STUDENT BALLOON PROGRAMME |

**SESSION 3: F - Hyper-gravity & Low-gravity Experiments (Thursday 10th - 09.30) Chairman: Dr. Natacha Callens**

- |   |                   |   |
|---|-------------------|---|
| 1 | Davide Petrillo   | FELDS EXPERIMENT: A NEW FLEXIBLE SOFT DOCKING CONCEPT   |
| 2 | Giulia Becatti    | PHOS EXPERIMENT: THERMAL RESPONSE OF A LARGE DIAMETER PULSATING HEAT PIPE ON BOARD REXUS 18 ROCKET                                      |
| 3 | Ágota Simon       | INTERACTION OF LASER EXPOSED NON-ANTIBIOTIC SOLUTIONS WITH TARGET SURFACES IN HYPERGRAVITY CONDITIONS: ESA “SPIN YOUR THESIS!” CAMPAIGN |
| 4 | Zafiro Aspidou    | EFFECT OF HYPERGRAVITY ON BACTERIAL MOTILITY AND HEAT RESISTANCE  |
| 5 | Marcello Valdatta | FROM REDEMPTION TO ARTICA. THE ROAD FROM AN EDUCATIONAL PROJECT TO AN ACTUAL DEVICE   |
| 6 | Miriam Manzoni    | SPIN YOUR THESIS! 2013: A PULSATING HEAT PIPE ON THE LARGE DIAMETER CENTRIFUGE  |

**SESSION 4: D - Educational Programs & Strategies 2 (Thursday 10th - 11.30) Chairman: Prof. Michéle Lavaqna**

- |   |                      |  |
|---|----------------------|--|
| 1 | Marcello Onofri      | HIGH EDUCATION OPPORTUNITIES OFFERED TO GRADUATE STUDENTS BY THE EUROPEAN MASTER IN “SPACE TRANSPORTATION SYSTEMS” |
| 2 | Federico Curiano'    | EDUCATIONAL ACTIVITY OF SAPIENZA SPACE SYSTEMS AND SPACE SURVEILLANCE LABORATORY – S5LAB                           |
| 3 | Marco Bosco          | SPACE ENGINEERING AND SMALL SATELLITES EDUCATIONAL ACTIVITIES AT UNIVERSITY OF BOLOGNA                             |
| 4 | Alexander Biebricher | ON THE STUDENT ROCKET PROGRAM AT ANDØYA SPACE CENTER   |

**SESSION 5: E - Atmospheric & Planetary Experiments (Thursday 10th - 17.00) Chairman: Prof. Anton Ivanov**

- |   |                              |  |
|---|------------------------------|--|
| 1 | Encarnación Serrano Castillo | AEROSOLS AND CLOUDS FORMATION RESEARCH IN A5-UNIBO EXPERIMENT ONBOARD BEXUS 18- LESSONS LEARNED        |
| 2 | Sascha Wizemann              | MICRO-REENTRY-CAPSULE-2 REXUS  |
| 3 | Timo A Stein                 | THE COSMIC PARTICLE TELESCOPE PROJECT – FIRST RESULTS  |
| 4 | Sebastiano Chiodini          | MISSUS EXPERIMENT SENSORS DATA ANALYSIS  |
| 5 | Daniel Nilsson               | SALACIA REXUS PROJECT  |
| 6 | Matteo Duzzi                 | SCRAT EXPERIMENT: A STUDENT EXPERIENCE   |
| 7 | Davide Paganini              | POLARIS EXPERIMENT: STRATOSPHERIC FLIGHT OUTCOMES AND EXPERIENCE GAINED FROM THE REXUS-BEXUS PROGRAMME |

**SESSION 6: C - Educational Programs & Strategies 1 (Friday 11th - 09.30) Chairman: Dr. Riccardo Rando**

- |   |                   |  |
|---|-------------------|--|
| 1 | Reinhard Tlustos  | EDUCATIONAL OPPORTUNITIES THROUGH MARS ANALOG RESEARCH   |
| 2 | Chantelle Dubois  | THE CANADIAN SATELLITE DESIGN CHALLENGE: BUILDING FUTURE SPACE CAPABILITY IN CANADA                  |
| 3 | Johannes Gutmiedl | PROVIDING HANDS-ON SPACE EDUCATION BY INVOLVEMENT OF COLLABORATING SELF-RELIANT STUDENT TEAMS        |
| 4 | Chantelle Dubois  | SPACE GENERATION ADVISORY COUNCIL PROJECT GROUPS- EDUCATIONAL ACTIVITIES IN AN INTERNATIONAL NETWORK |

**SESSION 7: B - Nanosat Technologies (Friday 11th - 11.30) Chairman: Prof. Anton Ivanov**

- |   |                    |  |
|---|--------------------|--|
| 1 | Lasse Bromose      | TOWARDS A COLLABORATIVE DISTRIBUTED GROUND STATION FOR SMALL CUBESAT TEAMS   |
| 2 | Mauro Ricci        | ICE CUBES – A FAST TRACK, LOW COST SERVICE FOR SMALL EXPERIMENTS TO THE ISS  |
| 3 | Arthur Scharf      | HORIZON ACQUISITION FOR ATTITUDE DETERMINATION USING IMAGE PROCESSING ALGORITHMS - HORACE ON REXUS 16 – AN EDUCATIONAL PROJECT |
| 4 | Marcella Iuzzolino | THE QUADRUPLE IMAGE MULTI-BAND SENSOR. AN INNOVATIVE CUBESAT PAYLOAD AGAINST EXOPLANET TRANSIT FALSE DETECTIONS                |
| 5 | Damien Watremetz   | DEVELOPMENT AND TESTING OF THE ON-BOARD SOFTWARE FOR QB50 NANOSATELLITE IP2SAT   |
| 6 | Boris Segret       | AUTONOMOUS NAVIGATION FOR DEEP-SPACE CUBESATS  |
| 7 | Olga Mamoutova     | ON DESIGN FOR RELIABILITY OF ELECTRONICS IN NANOSATELLITE  |

**SESSION 8: I - Students Rocketry (Friday 11th - 15.00) Chairman: Prof. Michèle Lavaqna**

- |   |                   |   |
|---|-------------------|---|
| 1 | Christian Bach    | SOUNDING ROCKET DEVELOPMENT WITH LIQUID PROPELLANTS WITHIN THE DLR STERN PROGRAMME                  |
| 2 | Filippo Trevisi   | IMPROVING A SOUNDING ROCKET TECHNOLOGY DEMONSTRATOR FOR STUDENT EXPERIMENTAL ACTIVITIES             |
| 3 | Aureliano Rivolta | LOW COST MEMS IMU CALIBRATION FOR AEROSPACE STUDENT ACTIVITIES                                      |
| 4 | Danylo Malyuta    | ACTIVE MODEL ROCKET STABILIZATION VIA COLD GAS THRUSTERS  |
| 5 | Giovanni Pandolfi | PRIMO: AN ULTRALIGHT LAUNCH VEHICLE FOR NANO AND MICROSATELLITES                                    |
| 6 | Hamed Gamal       | DESIGN, SIMULATIONS AND ANALYSIS OF AN AIR LAUNCH ROCKET FOR HUNTING LOW EARTH ORBIT'S SPACE DEBRIS |

**SESSION 9: H - Students Research (Friday 11th - 17.30) Chairman: Prof. Alessandro Francesconi**

- |   |                            |  |
|---|----------------------------|--|
| 1 | Alvaro Tomàs Soria Salinas | CONVECTIVE HEAT TRANSFER MEASUREMENTS AT THE MARTIAN SURFACE                                 |
| 2 | Lorenzo Bucci              | ROBOTIC REFUELING SYSTEM FOR ON ORBIT SERVICING  |
| 3 | Gilberto Grassi            | MODELING A NEW CONCEPT OF TETHER DEPLOYER WITH RETRIEVABLE CAPABILITY FOR SPACE APPLICATIONS |
| 4 | Alessandro Serboli         | LARGE DEPOT TO SERVICE MANNED MARS MISSIONS  |
| 5 | Simon Olvhammar            | SOFTWARE-DEFINED DICKE-SWITCHED RADIOMETRY USING ETTUS USRP AND GNU RADIO                    |

**Poster Session (Thursday 10th - 15.00)**

- |    |                    |   |
|----|--------------------|---|
| 1  | Sebastian Hettrich | ANALOGUE PLANETARY RESEARCH AS A TOOL FOR EFFECTIVE SPACE EDUCATION                                   |
| 2  | Sergio Erculiani   | SEARCHING FOR LIFE FINGERPRINTS IN THE LABORATORY   |
| 3  | Zoe Lola           | "SO... YOU WANT TO LEAVE THE EARTH" THE NECESSITY OF ASTRONAUTS PSYCHOSOCIAL SUPPORT                  |
| 4  | Cem Avsar          | BENEFITS AND CHALLENGES OF STUDENT DRIVEN SPACE PROJECTS: A SURVEY ON HANDS-ON EDUCATION AT TU BERLIN |
| 5  | Chris Brunskill    | UBO: A POCKETQUBE KIT FOR EDUCATION ON SATELLITE SYSTEMS AND NEW MISSION CONCEPTS                     |
| 6  | Jonata Puglia      | SCHEDULING ALGORITHM FOR A GROUND STATIONS NETWORK  |
| 7  | Avishek Ghosh      | A STUDY AND APPROACH TO USE LUNAR REGOLITH FOR 3D PRINTING IN MICROGRAVITY ENVIRONMENT                |
| 8  | Renato Macchietto  | ZERO ROBOTICS: THE EXPERIENCE OF A HIGH SCHOOL TEAM FACING REAL SPACE PROBLEMS                        |
| 9  | Maxime Sixdeniers  | A NICHE PROFESSIONAL NETWORK FOR THE SPACE INDUSTRY   |
| 10 | Mauro Ricci        | ICE CUBES – A FAST TRACK, LOW COST SERVICE FOR SMALL EXPERIMENTS TO THE ISS                           |