



# ESA & CNES Final Presentations : Space Environments and Radiation Effects on EEE components

## Monday, 6 March 2017

### Space Environments and Effects - Newton2 (09:45 - 13:00)

| time  | [id] title  | presenter                    |
|-------|---|------------------------------|
| 09:45 | [14] Introduction & Executive summary   | Dr FERLET-CAVROIS, Veronique |
| 10:30 | [16] ESABASE2: Overview, Maintenance and Distribution Summary and Recent Developments | Dr BUNTE, Karl Dietrich      |
| 11:10 | Coffee break  |                              |
| 11:40 | [17] Space debris from spacecraft degradation products                                | Dr GORDO, Paulo              |
| 12:20 | [19] Multi-Needle Langmuir Probe (M-NLP) development                                  | BEKKENG, Tore André          |
| 12:40 | [63] In-flight data from POLAR  | Dr XIAO, Hualin              |

### Space Environments and Effects: TEC-EPS - Newton2 (14:00 - 18:25)

| time  | [id] title   | presenter                |
|-------|--|--------------------------|
| 14:00 | [20] Dust electrostatic charging, transport and contamination model for Lunar Lander and human exploration missions        | Mr RUARD, Benjamin       |
| 14:30 | [21] Numerical simulations of Solar Orbiter at its perihelion: spacecraft charging, effects on RPW and SWA-EAS instruments | Dr GUILLEMANT, Stanislas |
| 15:00 | [23] ODI databases maintenance   | Dr HEYNDERICKX, Daniel   |
| 15:30 | Coffee break   |                          |
| 16:00 | [27] PAMELA Data Exploitation  | Dr BRUNO, Alessandro     |
| 17:00 | [62] Two new ESA projects for radiation belt modelling   | Dr HEYNDERICKX, Daniel   |

## Tuesday, 7 March 2017

### Space Environments and Effects: ESA (TEC-EPS) - Newton2 (09:15 - 12:00)

| time  | [id] title   | presenter                 |
|-------|--|---------------------------|
| 09:30 | [28] SSA programme update  | Mr LUNTAMA, Juha-Pekka    |
| 09:50 | [29] SSA Space Weather Elements Radiation Expert Service Centre overview and coordination with TEC Space Environments and Effects activities | Dr GLOVER, Alexi          |
| 10:10 | [31] Non-Ionsing Energy Loss (NIEL) calculation software and verification  | Dr RANCOITA, Pier Giorgio |
| 10:30 | [43] High LET radiation effects on DNA in water  | Dr SCHWARZ, Christian     |
| 10:50 | Coffee break   |                           |
| 11:20 | [33] Recent vulnerability and hardening studies of optical systems, fibers and fiber sensors at high radiation doses                         | GIRARD, Sylvain           |

### Space Environments and Effects: CNES - Newton2 (12:00 - 17:50)

| time  | [id] title   | presenter                                    |
|-------|--|--|
| 12:00 | [65] CNES Introduction   | Mrs BEZERRA, Françoise<br>Mr ECOFFET, Robert |
| 12:15 | [53] Results from the ICARE-NG detectors onboard SAC-D, JASON 2 and JASON 3 satellites                       | Dr MAGET, Vincent                            |
| 12:50 | [54] Highly energetic electrons in the inner zone  | Dr MAGET, Vincent                            |
| 13:10 | Lunch  |  |
| 14:00 | [55] Impact of the consideration of the LEO trapped proton anisotropy on dose calculation at component level | Dr VAROTSOU, Athina                          |
| 14:20 | [56] A New Proton Model for Low Altitude High Energy Specification (OPAL)                                    | Mrs SICARD-PIET, Angélica                    |
| 14:40 | [57] A new Global Radiation Earth Environement (GREEN) model   | Mrs SICARD-PIET, Angélica                    |
| 15:15 | Coffee Break   |  |
| 15:30 | [58] Impact of the consideration of AE9/AP9 models on the space radiation environment specification          | Dr VAROTSOU, Athina                          |
| 15:50 | [59] Benchmarking Ionising Space Environment models  | Dr BOURDARIE, Sebastien                      |
| 16:25 | [64] Data assimilation technique applied to electron Earth radiation belts                                   | Dr BOURDARIE, Sebastien                      |
| 16:45 | [60] Impact of the mission definition parameters on the space radiation environment specification            | Dr VAROTSOU, Athina                          |
| 17:05 | [61] OMERE space radiation environment and effects tool: new developments and new interface                  | Dr VAROTSOU, Athina                          |