## MORNING PROGRAM

### SESSION 1 | CHALLENGES FOR THE FUTURE

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Institution</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>9H30</td>
<td>DR. Stephen TAYLOR</td>
<td>ESA</td>
<td>Photovoltaic technology for space applications to cope with the needs of the present and the future</td>
</tr>
<tr>
<td>10H00</td>
<td>DR. Loris IBARRART</td>
<td>CNES</td>
<td>Solar cell models and measurements: an overview</td>
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<tr>
<td>10H30 - 10H45</td>
<td>Break</td>
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<tr>
<td>10H45</td>
<td>DR. Romain CARIOU</td>
<td>CEA</td>
<td>Towards a robust Si PV technology for space</td>
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<tr>
<td>11H15</td>
<td>DR. Carmine PELLEGRINO</td>
<td>Fraunhofer ISE</td>
<td>Strategies for cost reduction in III-V space solar cells</td>
</tr>
<tr>
<td>11H45</td>
<td>DR. César DOMINGUEZ</td>
<td>UPM</td>
<td>Micro-concentrators as mission enablers for deep space missions</td>
</tr>
<tr>
<td>12H15</td>
<td>DR. Francesco SOTTILE</td>
<td>LSI</td>
<td>Theoretical approaches for photovoltaics</td>
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### Lunch Break

12H45 - 14H00

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with the support of:
### AFTERNOON PROGRAM

#### SESSION 2 | RADIATION EFFECTS: MICROSCOPIC

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<tr>
<th>Time</th>
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<th>Topic</th>
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<tbody>
<tr>
<td>14H00</td>
<td>DR. Antonino ALESSI - LSI</td>
<td>Electron irradiation</td>
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<tr>
<td>14H20</td>
<td>DR. Gaëlle GUTIERREZ - JANNuS-Saclay</td>
<td>Overview of JANNuS irradiation facility</td>
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<tr>
<td>14H30</td>
<td>DR. Yana GURIMSKAYA - Solestial</td>
<td>Investigation of Radiation Damage in p-Type Silicon Induced by 1 MeV Electron Irradiation</td>
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<tr>
<td>15H00</td>
<td><strong>BREAK</strong></td>
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<tr>
<td>15H30</td>
<td>DR. Ahmad RASA KIRMANI - RIT</td>
<td>Radiation damage and healing mechanisms in halide perovskites</td>
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<tr>
<td>16H00</td>
<td>DR. Sophie DUZELLIER / DR. Thierry NUNS - ONERA</td>
<td>Degradation of PhotoVoltaic Assembly in the space environment</td>
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<tr>
<td>16H30</td>
<td>Océane GUILLOT - CEA</td>
<td>Si Heterojunction radiation hardness</td>
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<tr>
<td>17H00</td>
<td>DR. Valentin D. MIHAILETCHI - ISC</td>
<td>Silicon Solar Cell Technologies for Space Applications: Degradation and Regeneration Effects</td>
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<tr>
<td>17H30</td>
<td><strong>Poster session</strong></td>
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<td><strong>Lab guided tour - Solar cell set-ups (3 groups)</strong></td>
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<td>19H30</td>
<td><strong>GALA DINER</strong></td>
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</table>
DR. Tatsuya TAKAMOTO - SHARP
Introduction of Sharp Space solar cell products

10H30

DR. Carla COSTA - CNES
Perovskites robustness against space radiations

11H00 - 11H15 BREAK

11H15

DR. Victor KHORENKO - AZUR SPACE
Production of radiation hard III-V solar cells

11H45

Soufian YJJOU - TRAD
Solar cell radiation-induced degradation simulation tool for space applications

12H15

DR. Carlos ALGORA - UPM
Status of III-V flexible solar cells at the Solar Energy Institute of UPM

12H45 - 14H00 LUNCH
SESSION 4 | NEW EMERGING MATERIALS AND ARCHITECTURE

14H00 PR. Gavin CONIBEER - UNSW / Extraterrestrial
The revival of Silicon solar cells for space applications

14H30 DR. Maxime DARNON - LaHC
Micro fabrication of III-V-based solar cells for weight reduction and performance improvement

15H00 - 15H30 BREAK

15H30 DR. Stéphane COLLIN - CNRS / IPVF
Light trapping for ultrathin III-V & Si solar cells

16H00 DR. Pilar ESPINET GONZALEZ - The Aerospace Corporation
Solar Array Shielding: The Ultra-Light Approach

16H30 - 17H30 Round table
"Trends & challenges for next generation robust space photovoltaic solutions" & Final remarks
### POSTER SESSION

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<tr>
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| 1 | Enrique Barrigon et al, Universidad Malaga  
"Multijunction nanowire solar cells for space applications: current status and future prospects within ZEUS project" |
| 2 | Perrotin Louis et al, CEA  
"Thermomechanical behaviour of silicon interconnections"                                                                                     |
| 3 | Océane Guillot et al, CEA  
"Influence of silicon material compositional properties on the electronic quality of electron irradiated Ga-doped wafers"  |
| 4 | Antonino Alessi et al, LSI  
"Sirius electron accelerator"                                                                                                                  |
| 5 | Garcia-Sanchez Almudena et al, Universidad Politécnica de Madrid  
"Powering deep space missions: design of a low-thickness concentrator photovoltaic system able to achieve high specific power"  |
| 6 | Fernández Palacios Pablo et al, Universidad Politécnica de Madrid  
"TCAD optimization of lightweight lattice-matched 3J solar cells"                                                                                  |
| 7 | Cano Pérez Aitana et al, IES, Universidad Politécnica de Madrid  
"Defect detection in III-V space multijunction solar cells using reverse-bias stress tests"                                                        |
| 8 | Courtois Guillaume et al, Umicore Electro-Optic Materials  
"Germanium foil lift-off from re-usable mother wafer: sustainable, light-weight substrate for III-V MJ solar cells" |