

# **Power Workshop 2021, February 9-11**



## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## Welcome and Introduction

*Tuesday, 9 February 2021 09:30 (10 minutes)*

**Presenter:** FERLET-CAVROIS, Veronique (ESA)

**Session Classification:** Welcome and introduction

Contribution ID: 20

Type: **not specified**

## **Roundtable: Discussion and Conclusion**

*Tuesday, 9 February 2021 16:15 (1h 15m)*

**Session Classification:** Power Management Round Table

Contribution ID: 21

Type: **not specified**

## **Introduction - ESA**

*Tuesday, 9 February 2021 14:00 (25 minutes)*

**Presenter:** FERNANDEZ, Arturo (European Space Agency)

**Session Classification:** Power Management Round Table

Contribution ID: 22

Type: **not specified**

## **Electronic Unit FMECA State-of-the-Art - ESA**

*Tuesday, 9 February 2021 14:25 (25 minutes)*

**Presenter:** DELEPAUT, Christophe (ESA-ESTEC)

**Session Classification:** Power Management Round Table

Contribution ID: 23

Type: **not specified**

## **"Failure Modes Effects (and Criticality) Analysis – a Systematic analysis" and "Mission Classification" - ESA**

*Tuesday, 9 February 2021 14:50 (25 minutes)*

**Presenter:** COSSON, Fabrice

**Session Classification:** Power Management Round Table

Contribution ID: 24

Type: **not specified**

## **Failure barrier IF NCLE (Netherlands-China Low frequency Explorer)**

*Tuesday, 9 February 2021 15:25 (25 minutes)*

**Presenter:** HERNANDEZ, Pablo

**Session Classification:** Power Management Round Table

Contribution ID: 25

Type: **not specified**

## **Can FMECA ease the combined use of COTS and Hi-Reliability components? Airbus Defence & Space's point of view - Airbus**

*Tuesday, 9 February 2021 15:50 (25 minutes)*

**Presenter:** BOURBOUSE, Stéphanie (Airbus)

**Session Classification:** Power Management Round Table



Contribution ID: 41

Type: **not specified**

## **ESA Roadmap of activities in Solar Generators**

**Session Classification:** Solar Generators Round Table

Contribution ID: 42

Type: **not specified**

## **CNES activities and perspectives in Solar Generators**

**Session Classification:** Solar Generators Round Table

Contribution ID: 43

Type: **not specified**

## **Innovative concepts for SA design, manufacturing and testing - ESA**

*Tuesday, 9 February 2021 09:40 (10 minutes)*

**Presenter:** CAON, ANTONIO (ESA)

**Session Classification:** Solar Generators Round Table

Contribution ID: 44

Type: **not specified**

## **CNES activitiesand perspectives on solararray - Boirard Honorine, CNES**

*Tuesday, 9 February 2021 09:50 (10 minutes)*

**Presenter:** CNES

**Session Classification:** Solar Generators Round Table

Contribution ID: 45

Type: **not specified**

## **Flex Array opportunities / use cases outside high power telecom - Airbus DS**

*Tuesday, 9 February 2021 10:00 (10 minutes)*

**Presenter:** VAN HASSEL, Rob (Airbus Defence & Space)

**Session Classification:** Solar Generators Round Table

Contribution ID: 46

Type: **not specified**

## **Sparkwing: a new space approach to solar arrays - Airbus DS**

*Tuesday, 9 February 2021 10:10 (10 minutes)*

**Presenter:** VAN HASSEL, Rob (Airbus Defence & Space)

**Session Classification:** Solar Generators Round Table

Contribution ID: 47

Type: **not specified**

## **Next generation Space Solar Array - Space Tech**

*Tuesday, 9 February 2021 10:20 (10 minutes)*

**Presenter:** FERRANDO, Emanuele (SpaceTech GmbH)

**Session Classification:** Solar Generators Round Table

Contribution ID: 48

Type: **not specified**

## **SOLARFLEX The European compact, lightweight and modular Solar Array - Thales**

*Tuesday, 9 February 2021 10:30 (10 minutes)*

**Presenter:** GARCIN, ERIC (THALES ALENIA SPACE)

**Session Classification:** Solar Generators Round Table



Contribution ID: 49

Type: **not specified**

## **Wireless solar array testing: solar array wing verification without pulsed solar simulator measurement - AIRBUS DS**

*Tuesday, 9 February 2021 10:40 (10 minutes)*

**Presenter:** VERGNET, Dominique

**Session Classification:** Solar Generators Round Table

Contribution ID: 72

Type: **not specified**

## **Safe Solid State batteries for clean Space - Austrian Institute of Technology**

*Wednesday, 10 February 2021 09:00 (30 minutes)*

Presented by Austrian Institute of Technology

**Presenter:** ZHANG, Ningxin (Austrian Institute of Technology GmbH)

**Session Classification:** Energy Storage session

Contribution ID: 73

Type: **not specified**

## **Innovative High Energy Density Li-Ion batteries operating at low temperature - DUTH University, CERTH Institute, Airbus Company**

*Wednesday, 10 February 2021 09:30 (30 minutes)*

**Presenter:** FARMAKIS, Filippos (Democritus University of Thrace)

**Session Classification:** Energy Storage session

Contribution ID: 74

Type: **not specified**

## **Energy Storage Packaging Optimization - Almatech**

*Wednesday, 10 February 2021 10:00 (30 minutes)*

**Presenter:** IGLESIAS, Angel (Almatech SA)

**Session Classification:** Energy Storage session

Contribution ID: 75

Type: **not specified**

## **Safety Tests on VES16 Batteries - Saft**

*Wednesday, 10 February 2021 10:30 (30 minutes)*

**Presenter:** TRICOT, Hélène (SAFT Poitiers)

**Session Classification:** Energy Storage session

Contribution ID: 76

Type: **not specified**

## **Fuel Cells Roadmap and on-going activities at ESTEC - ESA**

*Wednesday, 10 February 2021 11:00 (30 minutes)*

**Presenter:** BUERGLER, Brandon (European Space Agency)

**Session Classification:** Energy Storage session

Contribution ID: 77

Type: **not specified**

## **ESA perspective, R&D activities**

*Thursday, 11 February 2021 09:00 (4 hours)*

**Session Classification:** Fuel cells session

Contribution ID: 78

Type: **not specified**

## **Industry roadmaps**

*Thursday, 11 February 2021 14:00 (2h 30m)*

**Session Classification:** Fuel cells session



Contribution ID: 79

Type: **not specified**

## **Roundtable**

*Thursday, 11 February 2021 16:30 (1 hour)*

**Session Classification:** Fuel Cells Roundtable

Contribution ID: **80**

Type: **not specified**

## **COTS SC assessments - CNES**

**Presenter:** CNES

**Session Classification:** Solar Generators Round Table

Contribution ID: **81**

Type: **not specified**

## **A path to low cost 30% solar cells: dual junction solar cells with light management - Airbus SD**

*Tuesday, 9 February 2021 11:00 (10 minutes)*

**Presenter:** ZIMMERMANN, Calus (Airbus)

**Session Classification:** Solar Generators Round Table

Contribution ID: 82

Type: **not specified**

## **AZUR Solar Cells Families – Highest Performance for Advanced Space Applications - AZUR Space**

*Tuesday, 9 February 2021 11:10 (10 minutes)*

**Presenters:** Dr KHORENKO, Victor (AZUR SPACE Solar Power GmbH); GUTER, Wolfgang (AZUR SPACE Solar Power GmbH)

**Session Classification:** Solar Generators Round Table

Contribution ID: **83**

Type: **not specified**

## **Specific test plan for flexible space solar cells - CESI**

*Tuesday, 9 February 2021 11:20 (10 minutes)*

**Presenter:** GABETTA, Giuseppe (CESI S.p.A.)

**Session Classification:** Solar Generators Round Table

Contribution ID: 84

Type: **not specified**

## **Next generation lattice-matched GaInNAs-based solar cells - Tampere University**

*Tuesday, 9 February 2021 11:30 (10 minutes)*

**Presenter:** GUINA, Mircea (Tampere University)

**Session Classification:** Solar Generators Round Table

Contribution ID: 85

Type: **not specified**

## **Ultra-thin high-efficiency solar cells: enabling flexible solar arrays and reducing costs - TF2**

*Tuesday, 9 February 2021 11:40 (10 minutes)*

**Presenter:** BISSELS, Günther (tf2 devices B.V.)

**Session Classification:** Solar Generators Round Table

Contribution ID: **86**

Type: **not specified**

## **Roundtable: Discussion and Conclusion**

*Tuesday, 9 February 2021 11:50 (1h 10m)*

**Session Classification:** Solar Generators Round Table



Contribution ID: 87

Type: **not specified**

## **CNES Roadmap presentation & Silicon core-shells to enable higher energy density Li-ion batteries**

*Wednesday, 10 February 2021 11:30 (30 minutes)*

**Primary authors:** Ms DELBEGUE, Diane; Mr RAGE, Bastien

**Presenters:** Ms DELBEGUE, Diane; Mr RAGE, Bastien

**Session Classification:** Energy Storage session

Contribution ID: **88**

Type: **not specified**

## **Welcome and ESA Energy Storage Roadmap presentation**

*Wednesday, 10 February 2021 08:45 (15 minutes)*

**Presenter:** Ms CARRÉ, Aurore

**Session Classification:** Energy Storage session