

# European GaN for Space Applications WORKSHOP PROGRAM

Research Executive Agency  
Place Rogier, 16 – 1049 Brussels, Belgium  
ROOM 19 SD1

8:30 – 17:30 TUESDAY, 19 NOVEMBER 2019

PROJECT TITLE & DOMAIN			SPEAKER	
8:30 – 9:00	<b>WELCOME &amp; INTRODUCTION</b> EU-REA 15" EDA 5" ESA 5"			
9:00 – 9:15 (+5"questions)	PROCESS DEVELOPMENT	<b>GaN-on-Silicon efficient mm-wave European system integration platform</b> EU Activity, H2020, SERENA	Kristoffer Andersson, ERICSSON	RF GaN
9:20 – 9:35 (+5"questions)	PROCESS DEVELOPMENT	<b>InAlN/GaN devices for improved performances</b> CNES Activity	Stephane Piotrowicz, III-V Lab	RF GaN
9:40 – 09:55 (+5"questions)	PROCESS DEVELOPMENT	<b>Space evaluation and qualification support of European GaN epitaxy source</b> ESA Activity, GSTP supported by UKSA	Andrew Barnes, ESA	RF GaN
10:00 – 10:15 (+5"questions)	PROCESS DEVELOPMENT	<b>Development of GaN supply chain and the eco-system SiC wafer supplier, various type of Epitaxy, packaging and thermal management</b> EDA Activity	Klaus Beilenhoff, UMS	RF GaN
10:20 – 10:35 (+5"questions)	PROCESS DEVELOPMENT	<b>Investigation and Preliminary Characterization of Components Building Blocks Needed to Establish a European mm-wave GaN Foundry Process</b> ESA Activity, TRP	Jouni Latti, ESA	RF GaN
10:40 – 11:10	<b>COFFEE BREAK</b>			
11:10 – 11:25 (+5"questions)	PROCESS DEVELOPMENT	<b>Develop of products and components based on UMS GH15 technology, for higher frequencies Ka band and above</b> EDA Activity	Johan Carlert, SAAB AB	RF GaN
11:30 – 11:45 (+5"questions)	PROCESS DEVELOPMENT	<b>Radiation and Humidity hardening by design and tests GH25 and upcoming GH15</b> CNES Activity	Klaus Beilenhoff, UMS	RF GaN
11:50 – 12:05 (+5"questions)	EVALUATION/ QUALIFICATION	<b>Millimetre wave Gallium Nitride Space evaluation and application to Observation Satellites</b> EU Activity, H2020, MIGANSOS	Ernesto Limiti, University of Tor Vergata	RF GaN
12:10 – 12:25 (+5"questions)	EVALUATION/ QUALIFICATION	<b>Preliminary reliability assessment of a European 0.25 μm GaN HEMT Process</b> ESA Activity, GSTP supported by ASI	Alessio Pantellini, LEONARDO	RF GaN
12:30 – 13:30	<b>LUNCH BREAK</b>			
13:30 – 13:45 (+5"questions)	PACKAGING	<b>New generation of High thermal efficiency components packages for space</b> EU Activity, H2020, HEATPACK	David Nevo, TAS-F	RF GaN
13:50 – 14:05 (+5"questions)	SYSTEM DEMONSTRATION	<b>Q/V band earth segment Link GaN based for Future high Throughput space systems</b> EU Activity, H2020, QV-LIFT	Giorgia Parca, ASI	RF GaN
14:10 – 14:25 (+5"questions)	SYSTEM DEMONSTRATION	<b>Ka-band GaN-based SSPA for flexible payloads and multicarrier operation for 5G satellite concept</b> EU Activity, H2020, FLEXGAN	Lorena Cabria, TTI	RF GaN

14:30 – 14:45 (+5"questions)	SYSTEM DEMONSTRATION	<b>Advanced Technological Solutions for X band Earth Observation Systems</b> EU Activity, H2020, ATOS	Francesco Scappaviva, MEC	RF GaN
14:45 – 15:15	<b>ROUND TABLE RF GaN</b>			
15:15 – 15:30	<b>COFFEE BREAK</b>			
15:30 – 15:45 (+5"questions)	PROCESS DEVELOPMENT	<b>Innovative reliable Nitride based power devices and applications</b> EU Activity, H2020, InRel-NPower	Gaudenzio Meneghesso, University of Padova	Power GaN
15:50 – 16:10 (+10"questions)	PROCESS DEVELOPMENT	<b>Development of GaN and Gallium-oxide power transistors for efficient energy conversion and applications in space</b> DLR Activity	Joachim Würfl, FBH	Power GaN
16:20 – 16:35 (+5"questions)	PROCESS DEVELOPMENT	<b>GaN Devices for space based DC-DC power conversion</b> ESA Activity, TRP and GSTP	Andrew Barnes, ESA	Power GaN
16:40 – 16:55 (+5"questions)	EVALUATION/ QUALIFICATION	<b>Radiation tests of commercial power GANFET</b> CNES Activity	Arnaud Dufour, CNES	Power GaN
17:00 – 17:30	<b>ROUND TABLE POWER GaN</b>			