

Programme Day 1 - 2020 DGON Inertial Sensors and Systems

Tuesday, September 15, 2020 - Central European Standard Time (CEST)

11:00 CEST	Welcome - Conference Chair	Peter Hecker <i>TU Braunschweig, Germany</i>
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Session 1: Fiber Optic Gyros - Chair: Thomas Erler

11:20	Performance characteristics of a multicore interferometric fiber optic gyroscope using a 7-core fiber	Austin Taranta <i>University of Southampton, UK</i>
11:45	Multipoint reset modulation for reduced crosstalk in a miniaturized fiber optic gyroscope	Wei Hong <i>Chinese Society of Inertial Technology(CSIT), China</i>
12:10	Microoptical gyros based on passive ring cavities	Yuri Filatov <i>Saint Petersburg Electrotechnical University, LETI, Russia</i>

12:35 **Break**

Session 2: Coriolis Gyros - Chair: Fabrice Delhaye

13:00	A new silicon axisymmetric gyroscope for aerospace applications	Nicolas Vercier <i>Thales Avionics, France</i>
13:25	Evolution and capitalization of a family of MEMS vibrating structure gyros (VSG)	Andrew Kelly <i>Collins Aerospace, UK</i>
13:50	Effect of electrostatic nonlinearity on force-to-rebalance mode of operation in CVG	Daryosh Vatanparvar <i>University of California, Irvine, USA</i>

14:15 **Break**

Session 3: Nuclear Gyros - Chair: Bertrand Morbieu

14:40	Compact near-navigation-grade IFOG inertial measurement unit IMU 400	Igor V. Fedorov <i>Optolink RPC, Moscow, Russia</i>
15:05	The influences of cell's temperature characteristic on the performance of nuclear magnetic resonance gyroscope	Wei Huang <i>Chinese Society of Inertial Technology(CSIT), China</i>

15:30 **Resumee**

Programme Day 2 - 2020 DGON Inertial Sensors and Systems

Wednesday, September 16, 2020

10:55
CEST

Welcome

Session 4: Accelerometers - Chair: Yuanxin Wu

11:00

Silicon MEMS by Safran - Navigation grade accelerometer ready

*Fabrice Delhaye
Safran, France*

11:25

A miniature quartz vibrating beam accelerometer

*Ting Yang
Beijing Research Institute of Telemetry,
China*

11:50

A direct approach for high-quality MEMS based IMU/INS production

*Laurent Poletti
SBG Systems, France*

12:15

Break

Session 5: IMU Technology Aspects - Chair: Oleg Stepanov

12:40

IMU architecture based on functional redundancy to improve safety features and measurements availability during highly dynamic transients

*Massimo Verola
Civitanavi Systems, Italy*

13:05

H-infinity design of an EM- $\Sigma\Delta$ for MEMS gyroscopes

*Fabricio Saggin
Laboratoire Ampère Lyon, France*

13:30

High-g (20 000g+) testing of an existing tactical grade gyro design

*Reidar Holm
Sensoror AS, Norway*

14:00

Break

Session 6: Integrated Systems - Chair: Thomas Löffler

14:25

A pedestrian navigation system by low-cost dual foot-mounted IMUs and linter-foot ranging

*Maoran Zhu
Shanghai Jiao Tong University, China*

14:50

Zero velocity detector for foot-mounted inertial navigation system assisted by a dynamic vision sensor

*Shih Jao
University of California, Irvine, USA*

15:15

Advanced receiver autonomous integrity monitoring in tightly integrated GNSS/inertial systems

*Tim Martin
Northrop Grumman LITEF GmbH, Germany*

15:40

Closing & Announcement of next DGON ISS 2021

*Peter Hecker
TU Braunschweig, Germany*

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Alternate Presentations

A semi-physical model of Interferometric fiber optic gyroscopes and ways to improve the dynamic performance

Bo Huang,
Chinese Society of Inertial Technology (CSIT), China

GNSS+inertial+odometer navigation system for land vehicles with an extended odometer's model identification

Nikolay Vasilyuk
Topcon Positioning Systems, Russia

All times are CEST (Central European Standard Time)