## Navigation-grade MEMS gyroscopes: status and perspectives

日 時:2023年7月3日(月曜日) 11:00~12:00

3 July 2023 (Monday) 11:00~12:00

参加無料, 事前申込不要 Admission free, No advanced registration required

場 所:東北大学 青葉山キャンパス マイクロ・ナノマシニング研究教育センター 3階 セミナー室 Tohoku University, Aobayama Campus, Micro-Nanomachining Research & Education Center (MNC), 3rd floor, Seminar room

(田中(秀)研究室ウェブサイト「アクセス」ページの地図上 A14 の建物)

(Building A14 on the map at http://www.mems.mech.tohoku.ac.jp/access/index e.html)

主 催:田中(秀)研究室,マイクロ・ナノマシニング研究教育センター Organized by S. Tanaka Laboratory and MNC, Tohoku University

## 講 師:

## Prof. Giacomo Langfelder

Dipartimento di Elettronica, Informazione e Bioingegneria, Politecnico di Milano, Milano, Italy



Giacomo Langfelder received the Ph.D. in Information Technology in 2009 from the Politecnico di Milano, Italy, where he is now an Associate Professor of "MEMS and Microsensors" and of "Electronics". He is the author of about 200 publications and has applied for about 20 patents. His research includes sensors, actuators and related electronics. In 2015, he was a co-founder of the company ITmems. Prof. Langfelder has been a member of the TPC of various IEEE conferences since 2016, including MEMS, IEEE Sensors and IEEE Inertial, and the TPC chair of the IEEE Inertial conference in 2018 and 2022.

## 概 要:

A second dawn for MEMS inertial sensors is occurring, thanks to several applications requiring more and more performing sensors, eventually leading to inertial grade accelerometers and gyroscopes. Focusing on the latter, this talk will review the devices that in the literature have shown the best performance and will give perspectives towards future developments.

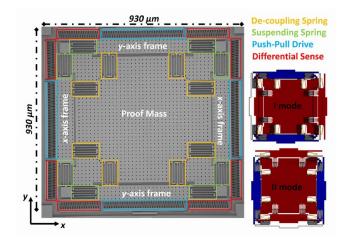


Fig. 1: MEMS resonator for gyroscope

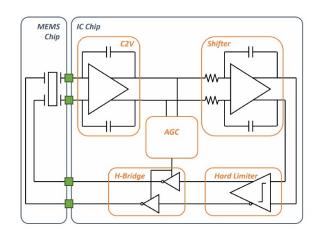


Fig. 2: Control system for FM gyroscope