



EMRP workshop “Atomic Clocks for Industry”

Friday, 27th June, Neuchatel, Switzerland (following EFTF 2014)

Time and frequency metrology is at the heart of many everyday activities. Two European Metrology Research Programmes (EMRP) “*New Generation Frequency Standards for Industry*” www.frequencystandards.eu and “*Compact microwave clocks for industrial applications*” www.inrim.it/Mclocks/ promote research on applied frequency metrology in order to respond to the ever rising demands in industry and the public sector.

For almost 3 years now, the projects have brought together several European partners to develop a wide range of frequency standards in the microwave and optical domain. Oriented towards applications in telecommunication, navigation, aerospace and defence, we have elaborated technology solutions combining metrology performance with small size, transportability and robustness.

To encourage in-depth exchange on results and on-going work, we appreciate participation of researchers, industrial manufacturers and end-users as well as space and government agencies in a dedicated workshop following EFTF 2014 on Friday 27th June 2014 at the Faculty of Science of the University of Neuchatel, Switzerland. Date and venue are co-located with other parallel workshops www.eftf-2014.ch/satellite.php.

Invited speakers include Patrick Berthoud (Oscilloquartz), Jerome Delporte (CNES), Ronald Holzwarth (Menlosystems), John Kitching (NIST), Helen Margolis (NPL), Salvatore Micalizio (INRIM), Jacques Morel (METAS), Pascal Rochat (Spectratime), Peter Rosenbusch (LNE-SYRTE) and Uwe Sterr (PTB). A poster session welcomes presentations from all participants. Lab tours at LTF-UniNe or CSEM are proposed in the late afternoon. Participation is free of charge and open to a large audience. Please register by mail to Peter.Rosenbusch@obspm.fr.

Looking forward to meeting you in Neuchatel

Pedro Corredera (CSIC), Jan Hald (DFM), Salvatore Micalizio and Massimo Zucco (INRIM), Yann Le Coq and Peter Rosenbusch (LNE-SYRTE), Jeremias Seppa (MIKES), Jaques Morel (METAS), Patrick Gill and Helen Margolis (NPL), Uwe Sterr (PTB), Gaetano Mileti (UniNe)

We acknowledge support from the Swiss Space Office and the Laboratoire Temps - Fréquence (LTF) of the University of Neuchatel.



EFTF 2014 satellite workshop

« Atomic Clocks for Industry »

Friday 27th June 2014,

Faculty of Sciences, University of Neuchatel

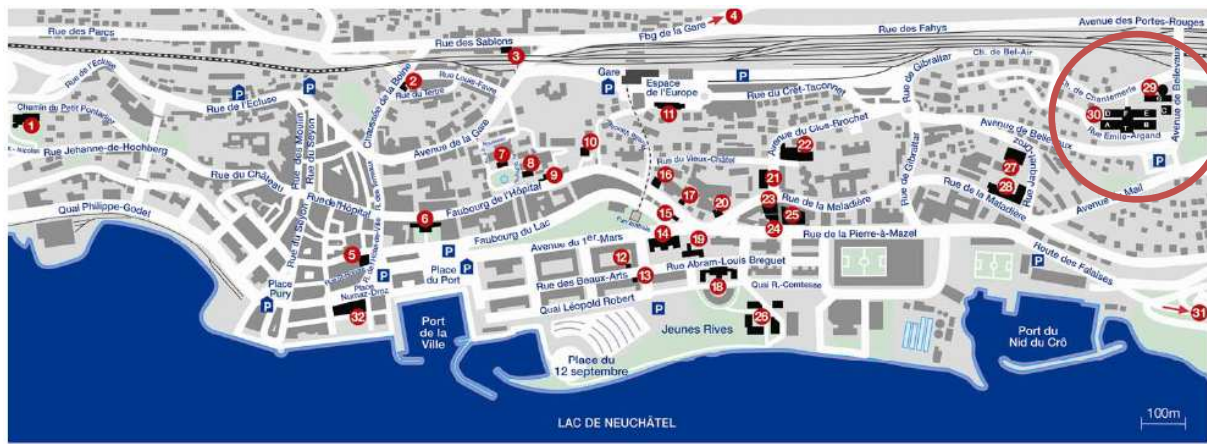
Rue Emile-Argand 11 - 2000 Neuchâtel

Presenting advances and results from the two European Metrology Research Programmes IND 14 and IND 55 we invite participation from industry, government organisations and research institutes.

	Welcome	Patrick Gill (NPL)
8h40	Requirements for commercial atomic clocks	Patrick Berthoud (Oscilloquartz)
9h20	Fibre-based optical wavelength standards	Jacques Morel (METAS)
9h40	Transportable optical local oscillators	Uwe Sterr (PTB)
10h00	Coffee break	
10h30	Low noise microwave synthesis from optical femtosecond combs	Helen Margolis (NPL)
10h50	Atom-referenced microwave standards	Peter Rosenbusch (LNE-SYRTE)
11h10	Microwave clocks for industrial applications	Salvatore Micalizio (INRIM)
11h40	Chip-scale atomic clocks after 10 years: technology development and transfer	John Kitching (NIST)
12h20	Discussion: "Frequency standards for industry - State of the art and future needs"	
12h30	Lunch	
14h00	Posters (common with EMRP "ion clocks")	
16h00	Lab tours at LTF University Neuchatel or CSEM	

<http://www.frequencystandards.eu/>

<http://www.inrim.it/Mclocks/>



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|---------------------------------|---------------------------|-------------------------------|---------------------------------------|
| 1 Rue de Saint-Nicolas 4 | 9 Fbg de l'Hôpital 27 | 17 Fbg de l'Hôpital 77 | 25 Rue de la Pierre-à-Mazel 11 |
| 2 Chaussée de la Boine 20 | 10 Fbg de l'Hôpital 41 | 18 Rue A.-L. Breguet 2 | 26 Espace Louis-Agasaiz 1 |
| 3 Rue des Sablons 46 | 11 Espace de l'Europe 4 | 19 Rue A.-L. Breguet 1 | 27 Rue Jaquet-Droz 7 |
| 4 Ch. du Pertuis-du-Sault 56-58 | 12 Rue des Beaux-Arts 21 | 20 Av. du 1er-Mars 33 | 28 Rue Jaquet-Droz 1 |
| 5 Rue St-Honoré 2 | 13 Rue des Beaux-Arts 28 | 21 Rue de la Maladière 23 | 29 Av. de Bellevaux 51 |
| 6 Fbg du Lac 5a | 14 Av. du 1er-Mars 26 | 22 Av. de Clos-Brochet 10 | 30 Rue Emile-Argand 11 |
| 7 Av. DuPeyrou 1 | 15 Fbg de l'Hôpital 106 | 23 Rue de la Maladière 8 | 31 Espace Paul-Vouga - 2068 Hauterive |
| 8 Av. DuPeyrou 4 et 6 | 16 Fbg de l'Hôpital 61-63 | 24 Rue de la Pierre-à-Mazel 7 | 32 Place Numa-Droz 3 |



Le progrès, une passion à partager



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