europass Curriculum vitae

PERSONAL INFORMATION

Giovanni Daniele Rovera

1170 Chemin de la tour du pey blanc, 13090 Aix-en-Provence, France

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Gender Male | Date of birth 22 February 1950 | Nationality Italian

WORK EXPERIENCE

April 2020 – Present — Senior consultant in time and frequency

Micro enterprise located in:
1170 Chemin de la tour du pey blanc, 13090 Aix-en-Provence, France.

Business or sector: Research and Consulting

December 1989 – March 2020 — Researcher in time and frequency metrology

LNE (detached to SYRTE/OP, formerly BNM detached to SYRTE/OP).
61 Avenue de l'Observatoire, 75014 Paris, France.

- Time scales.
- Precise time and frequency transfer and comparison.
- Development and evaluation of primary Caesium frequency standards.
- Development of instrumentation and electronic devices.
- Signal theory applied to metrology.
- Secondee appointed to the BIPM Time Department.

Formerly on same position:

- Responsible for the frequency measurement / synthesis chain, based on a femtosecond laser, linking the microwave frequency range to the near-infrared and visible frequency range.
- Responsible for the frequency measurement / synthesis chain, based on far-infrared lasers, linking the microwave frequency range to the mid-infrared frequency range.
- Development of secondary optical frequency standards and length standards.
- Accurate spectroscopy for metrological purposes.

Business or sector: Research

1985–1989 — Owner of an individual enterprise

Theotek 24 via Monviso, 12034 Paesana (Italy)

Realization of instrumentation for aerial sports and consultant in metrology.

Business or sector: Manufacturing and Consulting

1981 – 1994 — Research grant and Independent Consultant

Istituto Elettrotecnico Nazionale G. Ferraris (now INRIM): 115 Strada delle cacce, 10100 Torino (Italy)

Research in time and frequency metrology during a 2 year grant and several short consulting contracts.

Business or sector: Research and Consulting

EDUCATION AND TRAINING

1981–1982 — Abilitazione all'esercizio della professione di ingeniere

Politecnico di Torino Corso Duca degli Abruzzi, 10100 Torino, Italy

State certification to practice engineering

1970–1981 — Laurea di Dottore in Ingeneria Elettronica

Politecnico di Torino Corso Duca degli Abruzzi, 10100 Torino, Italy

Electronics, microwaves, control theory, communications theory.

PERSONAL SKILLS

Mother tongue: Italian

Other languages

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
French	C2	C2	C2	C2	C1
English	C1	C2	C1	C1	C1
Occitan	A1	A1	A1	A1	A1

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user
Common European Framework of Reference for Languages

Communication skills: Good ability to adapt to multicultural environments, gained through research collaboration in Europe, USA, China and Brazil. Participation to international committees and working groups.

Organizational / managerial skills: Good experience in project management.

Co-chair of an international conference

Job related skills:
- Development of electronic devices.
- Development of laser systems.
- Development of time/frequency standards.
- Knowledge of ISO/IEC standard 17025, technical expert COFRAC and SEMAC

Digital competences

SELF-ASSESSMENT				
Information Processing	Communication	Content creation	Safety	Problem solving
Independent user	Independent user	Independent user	Independent user	Independent user

Digital competences - Self-assessment grid

Computer skills: Linux, C, Fortran, Latex, LabView

Other skills: Glider pilot license. Hang gliding (coach of Italian team at the word championship in 1989), Mountain trekking, climbing.

Driving license: BE,CE.DE

ADDITIONAL INFORMATION

The study period overlaps with activity in the family company, mainly as a truck driver, operator of snow blowers and excavators.

Selected Publications

- G. D. Rovera, M. Siccardi, S. Römisch, and M. Abgrall, "Time delay measurements: estimation of the error budget," *Metrologia*, vol. 56, p. 035004, May 2019.
- E. Samain, G. D. Rovera, J. Torre, C. Courde, A. Belli, P. Exertier, P. Uhrich, P. Guillemot, R. Sherwood, X. Dong, X. Han, Z. Zhang, W. Meng, and Z. Zhang, "Time transfer by laser link (T2L2) in noncommon view between Europe and China," *IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control*, vol. 65, pp. 927–933, June 2018.
- P. Defraigne, W. Huang, B. Bertrand, and D. Rovera, "Study of the GPS inter-frequency calibration of timing receivers," *Metrologia*, vol. 55, pp. 11–19, dec 2017.
- G. D. Rovera, S. Bize, B. Chupin, J. Guéna, P. Laurent, P. Rosenbusch, P. Uhrich, and M. Abgrall, "UTC(OP) based on LNE-SYRTE atomic fountain primary frequency standards," *Metrologia*, vol. 53, no. 3, p. S81, 2016.
- P. Exertier, E. Samain, C. Courde, M. Aimar, J. M. Torre, G. D. Rovera, M. Abgrall, P. Uhrich, R. Sherwood, G. Herold, U. Schreiber, and P. Guillemot, "Sub-ns time transfer consistency: a direct comparison between GPS CV and T2L2," *Metrologia*, vol. 53, no. 6, p. 1395, 2016.
- G. D. Rovera, M. Abgrall, C. Courde, P. Exertier, P. Fridelance, P. Guillemot, M. Laas-Bourez, N. Martin, E. Samain, R. Sherwood, J.-M. Torre, and P. Uhrich, "A direct comparison between two independently calibrated time transfer techniques: T2L2 and GPS common-views," *Journal of Physics: Conference Series*, vol. 723, no. 1, p. 012037, 2016.
- G. D. Rovera, J.-M. Torre, R. Sherwood, M. Abgrall, C. Courde, M. Laas-Bourez, and P. Uhrich, "Link calibration against receiver calibration: an assessment of GPS time transfer uncertainties," *Metrologia*, vol. 51, no. 5, p. 476, 2014.
- J. A. Stone, J. E. Decker, P. Gill, P. Juncar, A. Lewis, G. D. Rovera, and M. Viliesid, "Advice from the CCL on the use of unstabilized lasers as standards of wavelength: the helium-neon laser at 633 nm," *Metrologia*, vol. 46, no. 1, pp. 11–18, 2009.
- G. D. Rovera, "Low frequency noise optically pumped FIR laser with frequency stabilized pump," *Optics Comm.*, vol. 143, pp. 247–251, 1997.
- A. Godone, A. De Marchi, G. D. Rovera, E. Bava, and G. Giusfredi, "Frequency measurement of 3P1 - 3P0 fine structure transition of 24Mg," *Physical Review A*, vol. 28, pp. 2562–2564, Oct. 1983.

Honours and awards

Prix LNE de la Recherche 2017