Felix PEROSANZ

Centre National d'Etudes Spatiales (CNES)
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Working at CNES since November 1996

EDUCATION AND DEGREE

- 2016: Habilitation thesis "GNSS in Space Geodesy"
- 1995: Ph.D. thesis in Space Geodesy
- 1989: Master in Astronomy and Aerospace, all from Paul Sabatier University, Toulouse, France

RESEARCH EXPERIENCE

I'm a GNSS expert at the French Space Agency (CNES) and I served as head of the CNES-CLS IGS Analysis Centre since 2007. I have been directly involved in successfully contributing to space missions like TOPEX/Poseidon and CHAMP. I possess over 25 years of teaching experience in GNSS, Space Geodesy, Astronautics and Flight Dynamics at various institutions, and I'm serving as the International GNSS Service Governing Board Chair since 2020. My main research skills are: GNSS, Earth gravity field modeling, flight dynamics, Earth deformation, reference frame, time metrology. I'm author/co-author of ~50 peer review publications. I supervised various Thesis/post-doc contracts like L. Lescarmontier (2011), F. Fund (2013), A. Kanj (2014), D. Moreira (2016), M. Zoulida (2016), G. Katsigianni (2019), A. Michel (in progress) and directed +20 Master student Internship.

MOST SIGNIFICATIVE PEER-REVIEW PUBLICATIONS

- Perosanz F., J.C. Marty, Balmino G., Dynamic orbit determination and gravity field model improvement from GPS, DORIS and Laser measurements on Topex/Poseidon satellite, Journal of Geodesy, (1997) 71: 160-170.
- Reigber, C., Balmino, G., Schwintzer, P., Biancale, R., Bode, A., Lemoine, J.-M., Koenig, R., Loyer, S., Neumayer, H., Marty, J.-C., Barthelmes, F., Perosanz, F., Zhu, S. Y.: A high quality global gravity field model from CHAMP GPS tracking data and

Accelerometry (EIGEN-1S). Geophysical Research Letters, 29(14), 10.1029/2002GL015064, 2002.

- Johannessen J.A., Balmino G.,C. Le Provost, R. Rummel, R. Sabadini, H. Sünkel, C.C. Tscherning, P. Visser, P. Woodworth and C. Hughes, P. Legrand, N. Sneeuw, Perosanz F., M.Aguirre-Martinez, H. Rebhan and M. R. Drinkwater (2003) The European gravity field and steady-state ocean circulation explorer satellite mission: its impact on geophysics.. Surveys in Geophysics Volume 24, Number 4, 339-386, DOI: 10.1023/B:GEOP.0000004264.04667.5e
- Loyer, S., Perosanz, F., Mercier, F., Capdeville, H. and Marty, J. C. (2012). Zero-difference GPS ambiguity resolution at CNES-CLS IGS Analysis Center. Journal of Geodesy 86(11): 991-1003.
- Petit, G., A. Kanj, S. Loyer, J. Delporte, F. Mercier and F. Perosanz. 1 × 10−16 frequency transfer by GPS PPP with integer ambiguity resolution. Metrologia 52 (2015) 301–309, doi:10.1088/0026-1394/52/2/301
- Moreira D., Calmant S., Perosanz F., Luciano Xavier L., Rotunno Filho O., Seyler F., Monteiro A. (2016). Comparisons of observed and modeled elastic responses to hydrological loading in the Amazon Basin: Hydrological loading in the Amazon basin. Geophysical Research Letters, September 2016. DOI: 10.1002/2016GL070265
- Barbu A., Laurent-Varin J., Perosanz F., Mercier F. and Marty JC., Efficient QR Sequential Least Square algorithm for high frequency GNSS Precise Point Positioning seismic application, Adv. Space Res. (2018), https://doi.org/10.1016/j.asr.2017.10.032
- Katsigianni, G., Loyer S., Perosanz F., Mercier F., R. Zajdel, K. Sosnica, Improving Galileo orbit determination using zero-difference ambiguity fixing in a Multi-GNSS processing. Adv. Space Res. (2018), https://doi.org/10.1016/j.asr.2018.08.035

VOLUNTARY ACTIVITIES

- Chair of the International GNSS Service (IGS) Governing Board (2020)
- Membership : AGU (American Geoscience Union), EGU (European Geoscience Union), GRGS (Groupe de Recherches de Geodesie Spatiale), CNFGG (Comité National Français de Géodésie et Géophysique)
- Convener/co-convener: EGU annual assembly GNSS session (since 2005), AGU (since 2019)
- Reviewer for International Journals: Journal of Geodesy, Advances in Space Research, Advances in Geosciences, IEEE-TGRS, IAG