

Publications de Elisabeth POZZO DI BORGO – Liste des publications depuis 1991

• *Articles dans revues internationales à comité de lecture*

- [1] Henry S., Pozzo di Borgo E. & Cavaillou A., (2013) Tracking geomagnetic fluctuations to picotesla accuracy using two superconducting quantum interference device vector magnetometers, *Rev. Sci. Instrum.* 84, 024501, doi:10.1063/1.4790715
- [2] Pozzo di Borgo E., J. Marfaing & G. Waysand, (2012) Minimal global magnetic millihertz fluctuation level determined from mid latitude underground observations, *European Physics Letters* 97, 4 49001 doi:10.1209/0295-5075/97/49001
- [3] Marfaing J., Pozzo di Borgo E., Waysand G., Cavaillou A. & Parrot M., (2011) Global observation of 24 November 2006 Pc5 pulsations by single mid-latitude underground [SQUID]<sup>2</sup> system, *Annales Geophysicae*, 29, 1977-1984, doi:10.5194/angeo-29-1977-2011
- [4] Waysand G., Marfaing J., Pozzo di Borgo E., Blancon R., Pyée M., Yedlin M., Barroy P., Auguste M., Boyer D., Cavaillou A., Poupene J. & Sudre C., (2011) Earth-Ionosphere Couplings, Magnetic Storms, Seismic Precursor and TLEs : Results and Prospects of the [SQUID]<sup>2</sup> System in the Low-Noise Underground Laboratory of Rustrel-Pays d'Apt, *C. R. Physique* 12 192–202, doi: 10.1016/j.crhy.2011.02.008
- [5] Marfaing J., Bois J-J, Blancon R., Pozzo di Borgo E., Waysand G., Gaffet S., Auguste M., Boyer D. & Cavaillou A., (2009) About the world-wide magnetic-background noise in the millihertz frequency range, *European Physics Letter*, 88, 19002, doi :10.1209/0295-5075/88/19002.
- [6] Waysand G., Barroy P., Blancon R., Gaffet S., Guilpin C., Marfaing J., Pozzo di Borgo E., Pyée M., Auguste M., Boyer D. & Cavaillou A., (2009). Seismo-Ionosphere Detection by Underground SQUID in Low-Noise Environment in LSBB – Rustrel, France – *European Physics Journal of Applied Physics* 47-1, 12705, doi: 10.1051/epjap
- [7] Jacquin L., Cambon C., Blin E. (1993). Turbulence amplification by a shock wave and rapid distortion theory, *Physics of Fluids A: Fluid Dynamics* (1989-1993) 5 (10), 2539-2550,
- [8] GA Gerolymos, E Blin, H Quiniou (1990) Comparison of inviscid computations with theory and experiment in vibrating transonic compressor cascades, *ASME Paper* 90

• *Articles dans revues nationales à comité de lecture*

- [9] Waysand G., Marfaing J., Pozzo di Borgo E., Blancon R., Pyée M., Yedlin M., Barroy P., Auguste M., Boyer D., Cavaillou A., Poupene J. and Sudre C. (2011) Couplages Terre–ionosphère, orages magnétiques, précurseurs sismiques et sylphes : résultats et prospects du système [SQUID]<sup>2</sup> au laboratoire souterrain de Rustrel-Pays d' Apt, *Comptes Rendus Physique*, Vol 12, n° 2, 192-202
- [10] G.A. Gerolymos, E Blin, H Quiniou (1991), Comparaison des calculs en fluide parfait de roues vibrantes de compresseur transsonique avec la théorie et l'expérimentation, *La Recherche aérospatiale*, 63-8.

• *Communications dans des congrès internationaux à comité de lecture et actes publiés,*

- [11] S Henry, E. Pozzo di Borgo, C Danquigny, B. Abi (2016) Simultaneous geomagnetic

monitoring with multiple SQUIDs and fluxgate sensors across underground laboratories, E3S Web of Conferences 12, 02003, <http://dx.doi.org/10.1051/e3sconf/20161202003>

- [12] Henry S., Pozzo di Borgo E., Danquigny C., Cavaillou A., Cottle A., Gaffet S. & Pipe M. (2014) Monitoring geomagnetic signals of groundwater movement using multiple underground SQUID magnetometers”, i-DUST 2014, Inter-Disciplinary Underground Science & Technology International Conference, May 5-7th, 2014, E3S Web of Conferences, Volume 4, 02004, <http://dx.doi.org/10.1051/e3sconf/20140402004>
- [13] S. Henry, E. Pozzo di Borgo, C. Danquigny, A. Cavaillou, A. Cottle, S. Gaffet, M. Pipe (2014) “Search for a geomagnetic signal produced by the movement of groundwater in fractured carbonate rocks”, Geophysical Research Abstracts, Vol. 16, EGU2014-13226
- [14] Fourie C., Febvre P., Pozzo di Borgo E. Waysand G., Gouws D, Saunderson E., Henry S., Gaffet S., Janse van Vuuren L., Lochner E. T., Matladi T. & Kwisanga C. (2013) First demonstration of transcontinental SQUID magnetometry (Invited), American Geophysical Union, Fall Meeting 2013, abstract #NH31B-1616
- [15] Janse van Vuuren L. J., Kilian A., Phiri T.-J., Fourie C. J., Pozzo di Borgo E., Febvre P., Saunderson E.F., Lochner E. T. & Gouws D. J., (2013). Implementation of an unshielded SQUID as a geomagnetic sensor, in Proc. IEEE AFRICON 2013, Mauritius, pp. 908-912
- [16] Febvre P., Pozzo di Borgo E., Chambodut A., Bernard S., Cavaillou A., Poupenev J., Boyer D. Sudre C. (2012) Assessment of squid magnetometers in an underground low-noise environment for detection of sismo-iono-magnetic events, III International conference on superconductivity and magnetism, 29 april-4 may, Kumburgaz, Istanbul (Turkey)
- [17] Pozzo di Borgo E.; Marfaing J.& Waysand G. (2012) Underground statistical measurements of the world-wide magnetic-background level in the millihertz frequency range with the [SQUID]<sup>2</sup> magnetometer, Geophysical Research Abstracts, Vol. 14, EGU2012-14103-2
- [18] Perineau A., Danquigny C., Emblanch C., Pozzo di Borgo E., Boyer D. & Poupenev J. (2011) Hydrodynamic organisation of the flows in the unsaturated zone of the Fontaine de Vaucluse karst system. First results, i-DUST 2010, Inter-Disciplinary Underground Science & Technology International Conference 01001, Geophysics, <http://dx.doi.org/10.1051/idust/201101001>
- [19] Barroy P., Waysand G., Bois J., Pozzo di Borgo E., Marfaing J., Blancon R., Gaffet S., Parrot M., Lefeuvre F. & Pyée M. (2008) Geomagnetic Storms as Monitored by the Underground Low-Noise SQUID Magnetometric system of LSBB-Rustrel, Proceedings Congrès Plasma SFP
- [20] Barroy P., Waysand G., Marfaing J., Pozzo di Borgo E., Blancon R., Gaffet S., Parrot M., Lefeuvre F., Pyée M. (2007). Ionospheric Effects as Monitored by the Underground Low-Noise SQUID Magnetometric system of LSBB-Rustrel: the particular case of the impact of the major Solar quakes of mid-December 06. Proceedings SUPRA – SEFIRA
- [21] Waysand G., Barroy P., Blancon R., Gaffet S., Guilpin C., Marfaing J., Pozzo di Borgo, E. & Pyée M. (2007) Permanent Observation of Ionospheric and Magnetospheric Effects by the Underground Ultra Low-Noise SQUID Magnetometric system of LSBB-Rustrel: Preliminary Results, Proceedings URSI

- [22] Barroy P., Gaffet S., Guilpin C., Marquis G., Waysand G., Blancon R., Pozzo di Borgo E., Cavaillou A., Boyer D. & Auguste M.,(2007), Comparing AC SQUID with conventional Fluxgate magnetometers in a low-noise environment for geomagnetism applications. Proceedings SUPRA - SEFIRA
- [23] Barroy P., Pozzo di Borgo E., Blancon R. & Waysand G. (2006) Ionosphere-Earth resonances detected by Superconducting Quantum Interference Device magnetometers at deep-buried underground LSBB laboratory ,. Proceedings ESCAMPIG XVIII, VOL 30; PART G, pages 79-80
- [24] Pozzo-di-Borgo E., Bordes C, Gaffet S., Blancon R., Auguste M., Boyer D. & A. Cavaillou (2006) The Low Noise Underground Laboratory, a unique environment for very weak electromagnetic measurements, Geophysical Research Abstracts, 1607-7962/gra/EGU06-A-04577
- [25] Jacquin L., Blin E., Geffroy P., (1993) An Experiment on Free Turbulence/Shock Wave Interaction. In: Durst F., Friedrich R., Launder B.E., Schmidt F.W., Schumann U., Whitelaw J.H. (eds) Turbulent Shear Flows 8. Springer, Berlin, Heidelberg
- *Communications dans des congrès nationaux à comité de lecture et actes publiés*
- [26] Waysand G., Marfaing J., Bois J.-J., Pozzo di Borgo E., Blancon R.,Gaffet S.,Pyée M.,Yedlin M., Barroy P., Auguste M., Boyer D., Cavaillou A., (2010)Couplages Terre-Ionosphère, Orages magnétiques, Précurseurs et TLE : Bilan et Perspectives des observations du système [SQUID]<sup>2</sup> au Laboratoire Souterrain Bas Bruit de Rustrel, URSI, Journées Scientifiques 2010 :Propagation et Plasmas, Nouveaux Enjeux, Nouvelles Applications, Paris , France
- [27] Waysand G., Barroy P., Blancon R., Gaffet S, Guilpin C., Marfaing J., Pozzo di Borgo E, Pyée M., Auguste M., Boyer D. & Cavaillou A. (2007) Détection de réponses sismo-ionosphériques par SQUID souterrain en environnement bas bruit au LSBB de Rustrel- Pays d' Apt, Quatrième Colloque Interdisciplinaire en Instrumentation, Nancy octobre 2007, France
- [28] Waysand G., Barroy P., Blancon R., Gaffet S, Guilpin C., Pozzo di Borgo E, Pyée M., Auguste M., Boyer D. & Cavaillou A. (2006), Réponses ionosphériques à des séismes détectées en souterrain par magnétomètre SQUID en environnement bas bruit, Proceedings Journées de la Matière Condensée SFP, août 2006, France
- [29] E. Blin, L. Jacquin and F. Micheli (1992) Sur l'analyse de la turbulence par vélocimétrie laser dans les écoulements supersoniques, Actes du 3<sup>o</sup> Congrès de Vélocimétrie Laser, Toulouse 21 24 septembre, France
- *Communications dans des congrès sans actes diffusés*
- [30] E. Pozzo di Borgo, C. Danquigny, J.B. Decitre, A.Cavaillou & P. Febvre (2016) Study of hydrogeology and magnetic phenomena in a karstic mountain with D2M2, a new Device for hydrogeology and Magnetic Measurements, 2016 i-DUST Inter Disciplinary Underground Science and Technology conference , 1-3 June 2016, Avignon, France
- [31] G. Waysand, E. Pozzo di Borgo & A. Cavaillou, (2016) Forced oscillations of the mesopause by electric field quake precursor during strong solar activity : [SQUID]<sup>2</sup> observation of the Nepal quakes, April 25th, 2015, 2016 i-DUST Inter Disciplinary

Underground Science and Technology conference , 1-3 June 2016, Avignon, France

- [32] P. Febvre, A. Bozbey, D. Balaban, S. Razmkhah, C. Çelik, E. Pozzo di Borgo, E. F. Saunderson D. J. Gouws & and C.J. Fourie, (2016) Analysis of different magnetic field noise environments for preparing a long base highly sensitive magnetic interferometer, 2016 i-DUST Inter Disciplinary Underground Science and Technology conference , 1-3 June 2016, Avignon, France
- [33] A. Bozbey, D. Balaban, S. Razmkhah, P. Febvre, C. Çelik, S. Gaffet, E. Pozzo Di Borgo, E. F. Saunderson & D. J. Gouws (2016) Comparison of different magnetic field noise environments for setting up a SQUID-based magnetometer network, Poster ISCM 2016, in Fethiye, Turkey
- [34] E. Pozzo di Borgo, P. Febvre, G. Waysand, C. Danquigny, A.Cavaillou, D. Boyern J.B. Decitre, & M. Auguste, (2014) An overview of the recent [SQUID]<sup>2</sup> activities, Couplings Earth-Atmosphere-Near universe, i-DUST Inter Disciplinary Underground Science and Technology conference 5-7 mai 2014, Apt, France
- [35] Febvre P., Bernard S., Pozzo di Borgo E., Chambodut A., Cavaillou A., Poupenev J., Boyer D., Sudre C., Fourie C., Phiri T., Saunderson E. & Gouws D., (2012) Towards an international network of superconducting magnetometers for geomagnetic and Earth-Ionosphere studies, 2012 i-DUST Inter Disciplinary Underground Science and Technology conference, 9-11 may 2012, Apt, France
- [36] Henry S., Kraus H. & Pozzo di Borgo E. (2012) Simultaneous measurements with two squid magnetometers at the laboratoire souterrain à bas bruit, iDUST Inter Disciplinary Underground Science and Technology conference, 9-11 may 2012, Apt, France
- [37] Pozzo di Borgo E.; Marfaing J.; Waysand G.& Cavailou A. (2012) In search of the minimal global magnetic level in the millihertz range through underground measurements, 2012 iDUST Inter Disciplinary Underground Science and Technology conference, 9-11 may 2012, Apt, France
- [38] Pozzo di Borgo E., Marfaing J., Bois J -J., Blancon R., Waysand G., Gaffet S.& Cavaillou A. (2010)The magnetic coupling of Earth-Ionosphere below 2m Hz, 2010 iDUST Inter Disciplinary Underground Science and Technology conference, 9-11 june 2010, Apt (France)
- [39] Pozzo di Borgo E., Marfaing J., Bois J ;J., Blancon R., Waysand G., Gaffet S., Auguste M., Boyer D.& Cavaillou A., (2009) Ionosphere magnetic noise determination by [SQUID]<sup>2</sup> underground ultra low noise magnetometer in the millihertz range, EUROFLUX2009 International conference, 21-23 sept., Avignon, France
- [40] Waysand G., Marfaing J., Bois J.J., Pozzo di Borgo E., Blancon R., Gaffet S., Auguste M., Boyer D., Cavaillou A. et Barroy P. (2009) A New Tool for Earth-Ionosphere Interactions: [SQUID]<sup>2</sup> Ultra Low Noise 3 Axis SQUID Magnetometer, status and perspectives, AGU Fall meeting, NH31C-1124, 14-18 december,.
- [41] Waysand G., Barroy P., Blancon R., Bois J., Gaffet S., Marfaing J., Pozzo di Borgo E., Pyée M., Auguste M., Boyer D. & Cavaillou A., (2008) ULF Magnetic Ionosphere Precursor Sichuan Earthquake Detected by [SQUID]<sup>2</sup> System in LSBB - Rustrel (France), AGU, Fall Meeting 2008, 13-19 décembre 2008, abstract #S53B-1838

- [42] Barroy P., Pozzo di Borgo E., Blancon R. & Waysand G., (2006) Investigating Ionosphere-Earth cavity by Superconducting Quantum Interference Device magnetometers at deep-buried underground LSBB laboratory , Proceedings JOURNEES SUPRA
- [43] Waysand G., Barroy P., Pozzo di Borgo E., Blancon R. (2006), Ionospheric Seismology: Watching the ionosphere from an ultra Low Noise Underground Laboratory, Proceedings WAVES
- *Chapitres d'ouvrages*
- [44] Pozzo di Borgo E., Febvre P., J. Poupeney & A. Cavallou, (2012) Magnétométrie en milieu bas bruit – dans Etudes Vauclusiennes n°79 ISSN 0153-9221, 33-48,
- *Autres Rapport sous contrat*
- [45] E. Blin, L. Jacquin et P. Geffroy (1993) , Etude expérimentale sur l'interaction choc/turbulence libre, RT ONERA 4/2496 AY
- [46] P. Geffroy, E. Blin, L. Jacquin, C. d'Humières, D. Soulevant et F. Micheli (1991) Mesures par vélocimétrie laser dans la couche de mélange d'un jet supersonique de révolution, RT ONERA 52/1447 AY
- [47] L Jacquin, E Blin, P Geffroy (1991) Experiments on free turbulence/shock wave interaction, NASA STI/Recon Technical Report A 92, 16104