

Publications de Philippe BELTRAME – Liste des publications depuis 1997

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[BMJ16] M. P. Beltrame, Makhoul and M. Joelson, "Deterministic transport in a ratchet flow," *Phys. Rev. E* (2016) 012208.

[Joel16] M. Joelson, J. Golder, P. Beltrame, M.C. Néel and L. Di Pietro "On fractal nature of groundwater level fluctuations due to rainfall process," *Chaos, Solitons & Fractals* 82 (2016) 103-115.

[MBJ15] M. Makhoul, P. Beltrame and M. Joelson, "Drag Force on a Confined Particle: Particle Transport," *International Journal of Mechanics* 9 (2015) 260-271.

[BeCh15] Ph. Beltrame and P. Chossat, "Onset of intermittent octahedral patterns in spherical Bénard convection," *European Journal of Mechanics - B/Fluids* 50 (2015) 156-174.

[Amal12] G. Amarandei, Ph. Beltrame, I. Clancy, C. O'Dwyer, A. Arshak, U. Steiner, D. Corcoran and U. Thiele, "Pattern formation induced by an electric field in a polymer–air–polymer thin film system," *soft Matter* (2012). DOI: 10.1039/C2SM25273B

[BHKT11] Ph. Beltrame, E. Knobloch, P. Hänggi and U. Thiele (2011), 'Rayleigh and depinning instabilities of forced liquid ridges on heterogeneous substrates,' *Physical Review E* 83, 016305.

[BeTh10] Ph. Beltrame and U. Thiele, "Time integration and steady-state continuation for 2d lubrication equations," *SIAM J. Appl. Dynamical Systems* 9, pp. 484-518 (2010).

[BHT09] Ph. Beltrame, P. Hänggi, and U. Thiele, "Depinning of three-dimensional drops from wettability defects," *Eur. Phys. Letters* 86 (2009), 24006.

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[Belt04] Beltrame, P. (2004), 'Modélisation of thin crack with varying conductivity in Eddy-Current Testing', *COMPEL* 23(4).

[BeBu04] Beltrame, P. & Burais, N. (2004), 'Generalization of the ideal crack model in Eddy-Current Testing', *IEEE Trans. on Magnetics* 23(4).

[BEH03] Beltrame, P.; Egbers, C. & Hollerbach, R. (2003), 'The Geoflow-experiment on ISS (part III): bifurcation analysis', *J. Adv. in Space Res.* 32(2), 191-197.

[Eetal03] Egbers, C.; Beyer, W.; Bonhage, A.; Hollerbach, R. & Beltrame, P. (2003), 'The GeoFlow-Experiment on ISS (Part I): Experimental preparation and design of laboratory testing hardware', *J. Adv. Space Res.* 32(2), 171-180.

[BeBu02b] Beltrame, P. & Burais, N. (2002), 'Application of regularization method of quasi-singular integrals to compute eddy-current distribution near cracks', *COMPEL* 21(4).

[BeBu02] Beltrame, P. & Burais, N. (2002), 'Computing Methods of Hypersingular Integral Applied to Eddy-Current Testing', *IEEE Trans. on Magnetics* 38, 1269-1272.

[BCL97] Beltrame, P.; Chossat, P. & Laure, P. (1997), 'Convection en double diffusion dans une coque sphérique', *C. R. Acad. Sci. Paris t. 325(Série I)*, 1049-1052.

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- [11] Ph. Beltrame, P. Hänggi, E. Knobloch and U. Thiele, "Depinning of 2d and 3d droplets blocked by a hydrophobic defect," in Progress in Industrial Mathematics at ECMI 2008, eds. A.D. Fitt, J. Norbury, H. Ockendon and E. Wilson, Springer Berlin Heidelberg, pp. 623-629 (2010).
- [10] Ph. Beltrame and Ch. Egbers. The (3,4) mode interaction in the geoflow framework. In Proc. Appl. Math. and Mechanics, volume 4, pages 474–475, 2004.
- [9] Ph. Beltrame and Ch. Egbers. Heteroclinic cycles of type ii in the (2,3) interaction in the geoflow-experiment. In S. Barth J. Peinke, A. Kittel and M. Oberlack (Eds.), editors, Progress in Turbulence, pages 133–136, 2005.
- [8] M. Gellert, P. Beltrame, and C. Egbers. The geoflow experiment -- spherical rayleigh-Bénard convection under the influence of an artificial central force field. In Journal of Physics, volume Conf. Series 14, pages 157–161, 2005.
- [7] Ch. Egbers, Ph. Beltrame, V. Travnikov, B. Futterer, and R. Hollerbach. Experiments and numerical simulation of supercritical thermal convective motions in the spherical gap flow experiment under central force field (geoflow). In H.I. Anderson and P.A. Krogstad (Eds.), editors, Advances in Turbulence, 2004.
- [6] V. Travnikov, Ph. Beltrame, and Ch. Egbers. Convection in the rotating spherical shell under the central force field: 3d flow and bifurcation analysis. In Eds. A. Bonano, G. Ruediger, editor, American Institute of Physics Conf. Proc., volume 733, pages 45–57, 2004.
- [5] P. Beltrame. Generalization of the ideal crack model in eddy-current testing. In COMPUMAG, 2004.
- [4] P. Beltrame. Modelisation of thin crack with varying conductivity in eddy-current testing. In EMF, 2004.
- [3] Ph. Beltrame, Ch Egbers, and V. Travnikov. Heteroclinic cycles in the geoflow-experiment on the international space station. In F. Marqués and A. Meseguer (Eds.), editors, Nonlinear Dynamics in Fluids, pages 171–174, 2003.
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