

Fédération Doeblin FR 2800 CNRS

Publications Fédération Doeblin

Directeur : Thomas Frisch

Directeur adjoint : Dario Vincenzi

Administratrice : Magali Varlet-Dusaucy

Publications des projets de la Fédération Doeblin (2018-2019-2020-2021-2022-2023)

(Les noms des porteurs de projets sont en bleu)

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A. Eloy, Z. Yao, R. Bachelard, W. Guerin, **M. Fouché**, R. Kaiser, Diffusing-wave spectroscopy of cold atoms in ballistic motion, *Phys. Rev. A.* **97**, 013810, (2018), **INPHYNI**

G.W. Fernandez Lorenzo, **M. P. Santisi d'Avila**, A. Deschamps, E. Bertrand, D. Mercerat, L. Foundotos, F. Courboulex, Numerical and empirical seismic response simulation of buildings: the case study of Nice prefecture, *Earthquake spectra*, **34**, 169-196, (2018), **LJAD-GEOAZUR**

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C. Ganino, **G. Libourel**, A. M. Nakamura, P. Michel, Are hypervelocity impacts able to produce chondrule-like ejecta? *Planetary and Space Science*, **177**, 104684, (2019), **GEOAZUR-LAGRANGE**

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G. Schifani, T. Frisch, **J. Brault**, P. Vennéguès, S. Matta, M. Korytov, B. Damilano, J. Massies, and J.-N. Aqua, Wetting-Layer-Free AlGaN Quantum Dots for Ultraviolet Emitters, *ACS Appl. Nano Mater.*, **3**, 4054, (2020), **CRHEA-INPHYNI**

T. Roca Filo, **B. Marcos**, Classical Goldstone modes in long-range interacting systems, *Phys. Rev. E* **102**, 3, 032122, (2020), **LJAD-INPHYNI**

J. Su, B. Suo, **P. Cassam-Chenai**, Theoretical Study of the Anisotropy Spectra of the Valine Zwitterion and Glyceraldehyde, *J. Phys. Chem. A*, **124**, 34, 6824-6833, (2020), **LJAD-INPHYNI**

I. Lior, A. **Sladen**, S. Sambolian, Strain to ground motion conversion of distributed acoustic sensing data for earthquake magnitude and stress drop determination, *Solid Earth* **12** (6), 1421-1442, (2021), **GEOAZUR-INPHYNI**

I. Lior, A. **Sladen**, C. Markou, On the Detection Capabilities of Underwater Distributed Acoustic Sensing, *Journal Geophysical Research-Solid Earth* **126**, e2020JB020925, (2021), **GEOAZUR-INPHYNI**

C. Sunday, **Y. Zhang**, Y. Thuillet, S. Tardivel, P. Michel, N. Murdoch, The influence of gravity on granular impacts I. A DEM code performance comparison, *ASTRONOMY & ASTROPHYSICS* **656** (A97), (2021), **LAGRANGE**

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M. Gromovyi, M. El Kurdi, X. Checoury, E. Herth, F. Tabtaba-Vakili, N. Bhat. A. Courville, F. Semond, **P. Boucaud**, Low-loss GaN-on-insulator platform for integrated photonics, *OPTICS EXPRESS* **30** (12), 20737-20749, (2022), **CRHEA**

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S. Curiotto, D. Paulovics, C. Raufaste, **F. Celestini**, T. Frisch, F. Leroy, F. Cheynis, P. Müller, Atomistic Description of Interdroplet Ice-Bridge Formation during Condensation Frosting, *Langmuir*, **39**,(1), 579-587, (2023), **INPHYNI**

Publications issues du programme de chercheurs invités

CNRS INP (2018 - 2019 - 2020 - 2021- 2022)

Chercheurs invités sur des supports CDD CNRS d'un mois.

(Les noms des invitants sont en bleu et des invités sont en rouges)

A.V. Kovalev, E. A. Viktorov, **N. Rebrova**, **A.G. Vladimirov**, **G. Huyet**, Theoretical study of mode-locked lasers with loop mirrors, *Semiconductor Lasers and Laser Dynamics VIII*, Proceedings of SPIE, **10682**, 1068226, (2018), **Laboratoire INPHYNI**

S.S. Ray, **D. Vincenzi**, Droplets in isotropic turbulence: deformation and breakup statistics, *J. Fluid Mech.* **852**, 313-328, (2018), **Laboratoire LJAD**

A.V. Kovalev, E.A. Viktorov, **N. Rebrova**, U. Gowda, **A.G. Vladimirov**, **G. Huyet**, Saturation effects in nonlinear loop mirror lasers: square wave operation, *Physics and Simulation of Optoelectronic devices XXVII*, Proceedings of SPIE **10912**, 109121M, (2019), **Laboratoire INPHYNI**

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S. Slepneva, B. O'Shaughnessy, **A.G. Vladimirov**, S.Rica, E.A.Viktorov, **G. Huyet**, Convective Nozaki-Bekki holes in a long cavity OCT laser, *Optics Express* **27**, 16395-16404,(2019), **Laboratoire INPHYNI**

U. Giuriato, **G. Krstulovic** & **D. Proment**, Clustering and phase transitions in a 2D superfluid with immiscible active impurities, *J. Phys. A: Math. Theor.* **52**, 305501, (2019), **Laboratoire LAGRANGE**

S. Richter, H. G. Zirnstein, **J. Zúñiga-Pérez**, E. Kruger, C. Deparis, L. Trefflich, C. Sturm, B. Rosenow, **M. Grundmann**, R. Schmidt-Grund, Voigt exceptional points in an anisotropic ZnO-based planar microcavity: Square-root topology, polarization vortices, and circularity, *Phy. Rev. Lett.* **123**, 227401, (2019), **Laboratoire CRHEA**

S.V. Nazarenko, **V.N. Grebenev**, S.B. Medvedev, S. Galtier, The focusing problem for the Leith model of turbulence: a self-similar solution of the third kind, *J. Phys. A: Math. Theor.* **52**, 155501, (2019), **Laboratoire INPHYNI**

Z. Gao, S. Golla, R. Sawant, V. Osipov, G. Briere, S. Veziar, B. Damilano, **P. Genevet**, **K. Dorfman**, Revealing topological phase in Pancharatnam-Berry metasurfaces using mesoscopic electrodynamics, *Nanophotonics*, **9**, 16, 4711-4718, (2020), **Laboratoire CRHEA**

D. Proment, **G. Krstulovic**, Matching theory to characterize sound emission during vortex reconnection in quantum fluids, *Phys. Rev. Fluids* **5**, 10, 104701, (2020), **Laboratoire LAGRANGE**

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M. Grundmann, Universal relation for the orientation of dislocations from prismatic slip systems in hexagonal and rhombohedral strained heterostructures, *Appl. Phys. Lett.*, **116**, 8, 082104, (2020), **Laboratoire CRHEA**

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A. Villois, **D. Proment**, **G. Krstulovic**, Irreversible dynamics of vortex reconnections in quantum fluids, *Phys. Rev. Lett.* **125**, 164501, (2020), **Laboratoire LAGRANGE**

R. Karsthof, H. von Wenckstern, **J. Zúñiga-Pérez**, C. Deparis, **M. Grundmann**, Nickel Oxide-based heterostructures with large band offsets, *Phys. Status Solidi B* **257**, 1900639, (2020), **Laboratoire CRHEA**

B.V. Semisalov, **V.N. Grebenev**, **S.V. Nazarenko**

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C.A. Hareland, G. Guillemot and **C.-A. Gandin** **P.W. Voorhees**, The thermodynamics of non-equilibrium interfaces during phase transformations in concentrated multicomponent alloys, *ACTA MATERIALIA* **241**, 118407 (2022), *Laboratoire CEMEF*



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