

DRAŽEN ZANCHI

Maître des Conférences hors classe, Université Paris Cité, UFR de Physique

CONTACT INFORMATION

Laboratory: Laboratoire Matières et Systèmes Complexes (MSC), UMR 7057 du CNRS

Institution: Université Paris Cité - Campus des Grands Moulins

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CURRENT POSITION(S)

- **Head of the Team:** Dynamics and Organisation of Soft Matter (DOMM), MSC Lab, Paris
 - **Elected Member:** Laboratory Board ("Conseil de laboratoire")
 - **Lecturer (MCHC):** Full-time permanent teaching at the University of Paris, Department (UFR) of Physics
 - **Reviewer for Journals:** Phys. Rev. Lett, Soft Matter, Langmuir, Journal of Molecular Biology, Cellulose, Food Hydrocolloids, Biomacromolecules
 - **Memberships:** Almae Matris Croaticae Alumni, Alexander von Humboldt Stiftung, Groupe "Polyphenols"
 - **Industry-Related Collaborations:** INRA - Sciences pour L'Œnologie, PRP – Polyphénols, STLO, IFPC, SANOFI
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PEDAGOGICAL, TEACHING, AND ADMINISTRATIVE RESPONSIBILITIES

- **Courses Taught during last 4 years:**
 - Experimental Physics Project (L3)
 - Experimental Project (L1)
 - Numerical Physics Project (L3)
 - Experimental FIP Project (L3, ENS)
 - Non-linear Physics (including numerical practicals)
 - **Supervision:**
 - 14 Master's students supervised
 - 2 PhDs co-supervised
 - 2 PhDs supervised
 - **Other Responsibilities:**
 - Elected Member of "Laboratory Council" of MSC Lab (since 2023)
 - Supervision of interns (L3, Master, Post-docs on ANR and transdisciplinary contracts)
 - Involvement in secondary education programs (MEEF, Agrégation Interne)
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PREVIOUS POSITIONS

2010 - 2019

P.A.S.T.E.U.R., UMR8640 ENS, Paris

Position: Researcher/Lecturer

1998 - 2010

LPTHE, UMR 7589, Paris

Position: Researcher/Lecturer

2005 - 2007

ESPCI, Laboratory PMMH UMR 7636, Paris

Position: Researcher/Lecturer

1996 - 1998

Freie Universität, Institute for Theoretical Physics of Condensed Matter, Berlin

Position: Post-Doctoral Fellow

1993 - 1996

University Paris Sud, LPS UMR8502, Orsay

Position: PhD Student

HIGHER EDUCATION

- **Engineer in Physics**, University of Zagreb, Croatia, 1993
 - **PhD in Physics**, University of Paris 11, 1993
 - **Habilitation to Conduct Research**, University of Split, 2019
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AWARDS & GRANTS

Recent Grants

1. **LabEx SEAM** - "Elastic rods", UPC (2025) - 10k€
2. **IdEx UPC** - "DynaVine" (2020-2022) - 50k€
3. **CNRS Défi Plastiques et micro-plastiques** - "Adhesion of phytoplankton" (2019-2020) - 45k€
4. **INRA Project Tanastrox** (2019-2020) - 40k€
5. **CASDAR Multidisciplinary Project** - "Colloidal destabilization" (2015-2019) - 300k€
6. **ANR-13-BS08-0001 DAPPléPur** (2013-2017) - 280k€
7. **ANR-11-LABX-0011** (2012-2024) - 10M€
8. **SAX(N)S Beamtime Allocations** (2005-2012) - ~25k€ per shift

Awards & Prizes

- **Alexander von Humboldt Stiftung Fellow (Permanent)**

- **Rector Prize for Best Diploma Work, University of Zagreb (1993)**
 - **Fellowship Prize, French Academy of Science (1994-1996)**
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5 SCIENTIFIC PUBLICATIONS

1. **Emilien Dilly, Sébastien Neukirch, Julien Derr, Dražen Zanchi**
Phys. Rev. Lett. (2023) - *Editors' Suggestion*
 - **Key Contribution:** Studied continuous handedness inversion of elastic helices, with applications in soft robotics and mechanical engineering.
 2. **Luka Gujinović, Ana Maravić, Hrvoje Kalinić, Dražen Zanchi, et al.**
Colloids and Surfaces B: Biointerfaces (2022)
 - **Key Contribution:** Metagenomic analysis of biofilm-forming marine bacteria, *Vibrio gigantis*, highlighting its adhesion dynamics.
 3. **Quentin Roveillo, Julien Dervaux, Yuxuan Wang, Dražen Zanchi, et al.**
Journal of the Royal Society Interface (2020)
 - **Key Contribution:** Discovered unexpected trapping of swimming microalgae in foam.
 4. **A. Shukla, T. Narayanan, D. Zanchi**
Soft Matter (2009)
 - **Key Contribution:** First complete structural study of milk casein micelles and their interaction with tannins.
 5. **D. Zanchi, H. J. Schulz**
Phys. Rev. B (2000)
 - **Key Contribution:** Formulated functional renormalization group for 2D interacting fermions.
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INDUSTRY-RELATED PROJECTS

- **CASDAR** - Agricultural development and rural transformation
 - **ENS-SANOFI** - Prevention of antibody drug conjugate aggregation
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