CURRICULUM VITAE

PERSONAL INFORMATION

Name and Surname: Kévin MARTINS

Date and place of birth: June 14, 1989, Paris, France

Current Place of Work: UMR 5805 EPOC, CNRS - University of Bordeaux, France

Current Position: Post-Doctorate Research Fellow

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EDUCATION

1/10/2014 – 30/09/2017: PhD at the University of Bath, UK

Faculty of Architecture and Civil Engineering

<u>Supervisors</u>: Chris Blenkinsopp (Senior Lecturer) and Jun Zang (Reader)

<u>Topic</u>: Wave transformation in the surf zone

10/2010 – 09/2013: MSc in Applied Mathematics at ENSEIRB-MATMECA, Talence, France

Department of Mathematical and Mechanical Modelling

09/2007 – 06/2010: Bachelor degree at University of Bordeaux, Talence, France

Department of Mathematics and Mathematical Engineering

CURRENT POSITION

1/03/2021 – *present*: Marie Skłodowska-Curie Fellow (Global Fellowship)

UMR CNRS 5805 EPOC, University of Bordeaux, France

Water Research Laboratory (WRL), University of New South Wales (UNSW),

Sydney, Australie

Supervisors: Philippe Bonneton (CNRS) and Ian Turner (WRL, UNSW)

lidBathy - Nearshore bathymetric inversion from lidars during extreme events

GRANTS AND FELLOWSHIPS

1/03/2021 – 31/08/2023: Marie Skłodowska-Curie Post-Doctoral Fellowship (Global Fellowship) awarded

by the European Commission for the project lidBathy (Nearshore bathymetric

inversion from lidars during extreme events)

1/01/2019 – 28/2/2021: Post-Doctorate Research Fellowship (Excellence Initiative, IdEx) awarded by the

University of Bordeaux (France), for the project *HySurf* (Hydrodynamics of the surf zone during extreme wave events, from wave breaking to nearshore

circulation and increased water levels)

1/10/2014 – 30/09/2017: PhD Scholarship awarded by the University of Bath, UK

SUPERVISION OF STUDENTS

1/10/2018 – 30/09/2021: PhD co-supervisor of Laura Lavaud, supervised by Xavier Bertin

LIENSs, CNRS - La Rochelle University

<u>Topic:</u> *Physical drivers of storm surge in the nearshore region.*

09/2019 – 06/2020: Supervision of a group of 2 students for their Personal Initiative Research

Projects (TIPE). Thematic of 2019-2020: Ocean.

TEACHING ACTIVITIES

10/2014 – 04/2016: Hydraulics, undergraduate students (University of Bath, UK).

09/2015 & 09/2016: GPS & Theodolite instructor, undergraduate students (University of Bath, UK).

PREVIOUS POSITIONS

1/01/2019 – 28/02/2021: Post-Doctorate Research Fellow (Excellence Initiative, IdEx)

UMR CNRS 5805 EPOC, University of Bordeaux, France

Supervisor: Philippe Bonneton (CNRS)

HySurf - Hydrodynamics of the surf zone during extreme wave events, from

wave breaking to nearshore circulation and increased water levels

1/12/2017 – 31/12/2018: Post-Doctorate Researcher

UMR CNRS 7206 LIENSs, La Rochelle University, France Supervisor: Xavier Bertin (Director of Research, CNRS)

Topic: Numerical modelling of surf zone hydrodynamics with the Vortex-

Force wave-current interaction formalism (SCHISM)

1/12/2013 – 31/03/2014: Metocean Engineer at DHI, Nantes, France

Supervisors: Nicholas Grunnet (Head of Department, Coastal and Estuarine

Dynamics) and Caroline Tessier (Principal Engineer)

Topic: Hydrodynamics and Spectral Wave modelling for the design and

installation of offshore wind farms.

02/2013 – 08/2013: Research intern at DHI, Hørsholm, Denmark

Supervisors: Nicholas Grunnet (Head of Department, Coastal and Estuarine

Dynamics) and Rolf Deigaard (Senior Expert)

Topic: Validation of MIKE21 Hydrodynamic and Wave modules in the surf zone

(EU-funded NOURTEC project, Terschelling, The Netherlands).

AWARDS

10/2016: Sensor for Water Interest Group (SWIG) Poster prize at the 7th International

Conference and Exhibition on Water Wastewater and Environmental Monitoring

2016 (WWEM), Telford, UK

03/2015: Best Poster prize at the Young Coastal Scientist and Engineers Conference

2015, Manchester, UK

LANGUAGES AND OTHER SKILLS

French: Mother tongue.

Portuguese: Fluent (second mother tongue).

English: Fluent and professional proficiency, TOEIC score of 940/990 (January 2012).

Italian: Fluent.

Commercial/Research Softwares/OS: Advanced working knowledge of Unix systems, MATLAB®, OpenFOAM, MIKEbyDHI, ANSYS FLUENT, GAMBIT, Salome and Code Saturne.

Programming: Advanced working knowledge of Fortran90. Basics of C++, C, Python and Web languages: HTML, CSS.

FIELD EXPERIMENTS AND COLLABORATIONS

I have spent over 3 complete months in the field as part of international projects in five different countries and contrasting environments. Through these experiments, I have developed many skills on the design and planning of field campaigns, as well as on the deployment, maintenance, retrieval of various coastal sensors and the processing of their data (*e.g.* currents meters, current profilers, pressure sensors, lidar scanners). Furthermore, I could develop essential interdisciplinary team skills with many scientists and technicians from different countries, who are now part of my extensive network and with whom I keep collaborating on a variety of projects. These collaborative field works and their context are described in more details in the table below.

Description of field work activities:

Project / Field Site	Collaborators	Objectives/Outcomes	Role
INLEX Albufeira Lagoon (Portugal) 2018	Xavier Bertin (PI), André Fortunato, Diogo Mendes, Laura Lavaud	Study the contribution of infragravity waves to shallow inlet hydro- and morphodynamics	Lead of the field deployment on the inlet flow delta and on adjacent beaches. Study led to 2 co-authored publications.
WASH Quintero (Chile) 2016	Chris Blenkinsopp (PI) Erwin Bergsma José Beya Hannah Power	Study the cross-shore transformation of surf zone waves using an array of lidar scanners	Design and assistance during the field deployment of the lidar scanner array. Post-processing of the data.
Mascaret Garonne River Podensac (France) 2016	Philippe Bonneton (PI) Natalie Bonneton Guillaume Detandt Frédéric Frappart	Study the non-hydrostatic processes of undular tidal bores using a lidar scanners	Design and lead of the lidar deployment. Post-processing and analysis of the data. Study led to 1 first author publication.
WASH Saltburn-by-the-Sea (UK) 2016	Chris Blenkinsopp (PI) Brittany Bruder Jack Puleo Hannah Power	Study the cross-shore transformation of surf zone waves using an array of lidar scanners	Design and lead of the field deployment of the lidar scanner array, pressure transducers and current meters. Post-processing and analysis of the data. Study led to 3 first author publications.
COASTVAR Nha Trang (Vietnam) 2015	Rafael Almar (PI) Luis Pedro Almeida Erwin Bergsma Nadia Sénéchal France Floc'h	Investigate hydro and morphodynamic processes of the surf and swash zones during a typhoon	Lead of the lidar deployment. Post-processing and analysis of the data. Study led to 1 co-author publication.
ROUSTY Camargue (France) 2014	Damien Sous (PI) Frédéric Bouchette François Sabatier Samuel Meulé Lise Petitjean	Investigate the link between the surf and swash zones, with groundwater levels	Lead of the lidar deployment. Post-processing and analysis of the data. Study led to 1 first author and 1 coauthor publications.