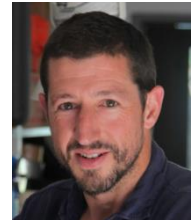


# Xavier BERTIN

**Age (nationality):** 41 (Française)  
**Place of birth:** La Rochelle  
**Civil state:** married, 2 childrens  
**Web page:** <https://lienss.univ-larochelle.fr/Bertin-Xavier-DR2>  
**Contact :** email : [xbertin@univ-lr.fr](mailto:xbertin@univ-lr.fr); Tel : +33 546507636



## *Researcher in coastal oceanography and dynamics*

### Positions occupied

2017-present **CNRS Research Director** at UMR 7266 LIENSs, CNRS/La Rochelle University, France.  
2013-present **Head of the team** « Physical Dynamics of Coastal Zones » at UMR LIENSs.  
2010-2017 **CNRS Research Officer** at UMR LIENSs.  
2008-2010 **Research Officer** at the Portuguese Civil Engineering Lab (LNEC).  
2006-2008 **Marie Curie Postdoctoral fellow** at LNEC, Lisbon, Portugal.  
2005-2006 **Assistant professor** at La Rochelle University, France.  
2002-2005 **PhD Student and Assistant professor** at La Rochelle University, France.

### Education

2015 **Habilitation to coordinate research activities**, specialty: Coastal oceanography and dynamics, defended on the 15/06/2015 at La Rochelle University, France.  
2002-2005 **PhD Thesis**, specialty: marine geology and coastal oceanography. Defended on the 15/09/2005 at La Rochelle University, France.  
2001-2002 **Master of Science**: « Geomaterials – Water: Transfers and interactions », universities of Poitiers and La Rochelle, head of the class.

### Research interests and approach

- **Coastal morphodynamics:** morphodynamics of tidal inlets, wave-current interactions, sediment transport, erosion, combining field observation with the development and application of numerical models.
- **Hydrodynamics under extreme events:** storm surges, marine flooding, infragravity waves, combining field observations with numerical modelling. Operational modelling and innovative coastal defense schemes.

### Teaching and supervision

- Supervision of 5 PhD Theses (G. Dodet, 2010-2013; J.-F. Breilh, 2011-2014, T. Guérin, 2013-2016; M. Pezerat 2018-; L. Lavaud, 2018-), 4 post-docs (G. Arnaud, 2014-2015; T. Guérin, 2016-2017 ; A. de Bakker, 2016-present; K. Martins, 2018) and 15+ Master and engineers, French and foreigners (Portugal, Spain, Netherlands).
- Lecturer in the Master “*Water, Environment and Oceanography*” at the University of Science and Technology of Hanoi (Vietnam), ~20 h/year in physical oceanography over 2017-2020.
- Lecturer in the Master « *Sciences for Environment* » at La Rochelle University since 2011, ~60 hr/year in Physical Oceanography, coastal dynamics and coastal risks.
- Lecturer in summer schools organized by the Universities of Faro (Portugal, 2015/07) and Lisbonne (Portugal, 2018/07).

### Coordination of research projects

<i>Project Title</i>	<i>Funding source</i>	<i>Budget allowed (€)</i>	<i>Period</i>	<i>Role</i>	<i>Purpose</i>
DURALIT	FEDER	247,5000	2017-2019	PI	Hydro-sedimentary dynamics of pre-littoral zones
EVEX	Regional Chair	300,000	2015-2018	PI	Impacts of extreme events on coastal erosion
RISC-KIT	EU-FP7	197,384	2013-2017	PI for the French case study	Mitigation of storm-induced coastal risks
DYNAMO	French ANR	175,000	2013-2016	PI	3D tidal inlets morphodynamics
MOWADI	Portuguese FCT	153,396	2009-2012	PI	Tidal inlet Morphodynamics

## Organisation of conferences

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- Co-chair of the French National Coastal Engineering conference (*Génie Cotier-Génie Civil*), La Rochelle, 29-31/05/2018. (160 participants)
- Chair of the International workshop on infra-gravity waves, La Rochelle 17-19/03/2017. (45 participants from Portugal, Spain, UK, The Netherlands and France)
- Co-chair of a Conference on Marine flooding, La Rochelle, 19-21/06/2014. (about 100 participants, including speakers from the USA, Portugal, The Netherlands, Italy and France)

## Expertise and evaluation

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- Reviewer for international journals: *Nature Com.* (2017), *Cont. Shelf Res.* (2007, 2008, 2013 (2), 2015, 2016), *Earth Surf. Dyn.* (2013, 2017), *Int. J. of Clim.* (2012, 2013), *J. of Geophys. Res.* (2014, 2015, 2016, 2018), *J. Coast. Res.* (2015 (2), 2016), *Ocean Eng.* (2010, 2013), *Ocean Mod.* (2008, 2010, 2011, 2012, 2013, 2016), *Mar.Geol.* (2016, 2017), *Mar. Pol. Bul.* (2009), *NHESS* (2015, 2017), among others.
- Expert for national research funding agencies: French ANR (2012, 2013, 2015), French INSU (2012, 2014), US NSF (2014) and Dutch NWO (2017).
- Participation to 10 PhD Jurys: S. Plecha (2011, U. Aveiro, Portugal), A. Laugel (2013, U. Paris-Est, France), F. Birrien (2013, U. Bordeaux, France), A. Silva (2014, U. Lisbonne, Portugal), A. Doré (2015, U. Bordeaux, France), A. Martinez (2015, U. Balearic, Spain), F. Rétif (2015, U. Montpellier, France), F. Mazas (2017, U. Paris-Est, France), A. Robinet (2017, U. Bordeaux, France), P. Guimarães (2018, U. Nantes, France).
- Participation to several PhD supervising committees: F. Toublanc (2012-2015, U. La Rochelle), B. le Mauff (2012-2017, U. Nantes), A. Nahon (2012-2017, U. Bordeaux), F. Arnoux (2016-2018, U. Pau), F. Bellafond (U. Pau), J. Reyns (U. Delft, The Netherlands).

## A few recent publications

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- Bertin, X.**, Mendes, D., Martins, K., Fortunato, A. B., and Lavaud, L., 2019. The closure of a shallow tidal inlet promoted by infragravity waves. *Geophysical Research Letters* 46.
- Bertin, X.**, de Bakker, A., van Dongeren, A., Coco, G., André, G., Ardhuin, F., Bonneton, P., Bouchette, F., Castelle, B., Crawford, W.C., Davidson, M., Deen, M., Dodet, G., Guérin, T., Inch, K., Leckler, F., McCall, R., Muller, H., Olabarrieta, M., Roelvink, D., Ruessink, G., Sous, D., Stutzmann, E. and Tissier, M., 2018. Infragravity waves: From driving mechanisms to impacts. *Earth-Science Reviews* 177, 774-799.
- Guérin, T., **Bertin, X.**, Coulombier, T. and de Bakker, A., 2018. Impacts of wave-induced circulation in the surf zone on wave setup. *Ocean Modelling* 123, 86-97.
- Chaumillon, E., **Bertin, X.**, Fortunato, A., Bajo, M., Schneider, J.-L., Dezileau, L., Walsh, J.P., Michelot, A., Chauveau, E., Créach, A., Hénaff, A., Sauzeau, T., Waeles, B., Gervais, B., Jan, G., Baumann, J., Breilh, J.-F., Pedreros, R., 2017. Storm-induced marine flooding: lessons from a multidisciplinary approach. *Earth-Science Reviews* 165, 151-184.
- Bertin, X.** and Olabarrieta, M., 2016. Relevance of infragravity waves at a wave-dominated inlet. *Journal of Geophysical Research: Oceans* 121 (8), 5418-5435.
- Guérin, T., **Bertin, X.** and Dodet, G., 2016. A numerical scheme to simulate coastal morphodynamics on unstructured grids. *Ocean Modelling* 104, 45-53.
- Bertin, X.**, Li, K. and Roland and Bidlot, J.R., 2015. The contribution of short waves in storm surges: two recent examples in the central part of the bay of Biscay. *Continental Shelf Research* 96, 1-15.
- Bertin, X.**, Li, K., Roland, A., Breilh, J.F., Zhang, Y.L. and Chaumillon, E., 2014. A modeling-based analysis of the flooding associated with Xynthia, central Bay of Biscay. *Coastal Engineering* 94, 80-89.

## Synthesis of my scientific production (based on Scopus on the 15/11/2019)

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Papers in international journals:	80+, 20 as 1 <sup>st</sup> auteur
Book chapters:	3, 2 as 1 <sup>st</sup> auteur
Conference proceedings:	50, 16 as 1 <sup>st</sup> auteur
Oral talks in international conferences:	14
Number of citations:	1635
h-index:	24

## Prizes and distinctions

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- 2018/10/06: innovation prize « *Réné Coutant* » from Academy of Saintonge.
- 2017/10/01: promotion as Research Director at CNRS, being one of the youngest ever promoted in my field.
- 2006/10/01: Marie Curie Intra-European Fellowship at LNEC (Portugal).