

1. PERSONAL INFORMATION

Interest: Numerical Modeling; Morphodynamics; Coastal Process, Coastal Risk.; Scouring; Lagrangian modelling, Hydrodynamics-structures interaction, Underwater Archaeological Heritage

2. EDUCATION

PhD in sciences Jun-2016.

University of Cádiz

Phd Thesis: Study of the influence of the physical, chemical and biological marine conditions in the deterioration and protection of underwater archaeological heritage.

(Qualification: 10/10 “cum laude”).

Supervisors: Dr. M. Bethencourt and A. Izquierdo.

MSc. in Integrated management Water. Jan 2010 –Mar 2011

School of Environmental and Marine Science, University of Cádiz.

MSc Thesis: Flood risk analysis in Guadalete Estuary. **(Qualification: 8.3/10).**

Supervisor: Dr. J.Benavente.

MSc. in Integrated management of coastal zones. Oct 2006 –Feb 2007.

Environmental Hydraulics Institute IH Cantabria. University of Cantabria.

MSc Thesis: .Study and alternatives to stabilize the beach Santa María del Mar. Cádiz.

(Qualification: 7.6/10).

Supervisor: Dr. C. Vidal.

Bsc Marine Science Oct 2000-Dec 2006.

Faculty of Marine and Environmental Science, University of Cádiz. **(Qualification:**

6.9/10).

3. PROFESSIONAL EXPERIENCE

PREVIOUS POSITIONS

1. Employing entity: Università degli studi di ferrara. Consorzio Futuro In Ricerca
Department: Department of Physics and Earth Sciences,

City employing entity: Ferrara, Emilia-Romagna, Italy
Email: frntms@unife.it
Start date: 01/05/2018
Type of contract: postdoctoral fellowship (Assegnista di ricerca)
Dedication regime: Full time
Primary (UNESCO code): 251007 - Physical oceanography; 251010 - Shore and near-shore processes
Secondary (UNESCO code): 250607 - Geomorphology
Performed tasks: Modelling atmospheric and ocean interaction process. Model development and implementation of a pan-European operational forecasting system of tides, waves and storm surge. Design, testing and modelling green solution for Disaster Risk Reduction.

Employing entity: Università degli studi di Ferrara. Consorzio Futuro In Ricerca
Department: Department of Physics and Earth Sciences,
Professional category: Post-doctoral
City employing entity: Ferrara, Emilia-Romagna, Italy
Email: frntms@unife.it
Start date: 01/11/2016
Type of contract: Temporary employment contract
Dedication regime: part time
Primary (UNESCO code): 251007 - Physical oceanography; 251010 - Shore and near-shore processes
Secondary (UNESCO code): 250607 - Geomorphology
Performed tasks: Modelling atmospheric and ocean interaction process. Model development and implementation of a pan-European operational forecasting system of tides, waves and storm surge. Design, testing and modelling green solution for Disaster Risk Reduction.

PREVIOUS POSITIONS

1. Employing entity: Consejo Superior de Investigaciones Científicas
Department: Department of ecology and coastal management, Instituto de Ciencias Marinas de Andalucía.
City employing entity: Puerto Real, Andalusia, Spain
Professional category: Graduate
Start-End date: 16/05/2016 - 31/10/2016 Duration: 5 months - 15 days
Type of contract: Temporary employment contract
Dedication regime: Full time
Primary (UNESCO code): 251007 - Physical oceanography; 251008 - Sea-air interactions

Secondary(UNESCO code): 251001 - Biological oceanography

Performed tasks: Acquisition and processing oceanographic data. Study of physical-biological interaction and coupling Modelling atmospheric and ocean interaction process. Modelling transport and dispersion of jellyfish Development and implementation of a pre-operational forecasting system for detection of jellyfish beaching.

2. Employing entity: Ministerio de Ciencia e Innovación. Investigación
Department: Department of applied physics, Universidad de Cádiz
City employing entity: Puerto Real, Andalusia, Spain
Professional category: Grant-assisted student
Start-End date: 01/09/2011 - 31/08/2015 Duration: 4 years
Type of contract: Grant-assisted student (pre doctoral)
Primary (UNESCO code): 220504 - Fluid mechanics; 250607 - Geomorphology; 251008 Sea-air interactions; 251010 - Shore and near-shore processes
Secondary (UNESCO code): 550501 - Archaeology
Performed tasks: Cruises for oceanographic data acquisition and oceanographic data processing. Modelling atmospheric and ocean interaction process. Numerical modelling hydrodynamic and waves. Modelling transport and dispersion process in the water column. Modelling sediment transport. Computational fluid dynamics. Monitoring biological communities development and ecological succession Monitoring marine corrosion process in archaeological materials. Study of the influence of physical, chemical and biological conditions in the damage and protection of underwater historical heritage.
3. Employing entity: Topysub S.L
City employing entity: Puerto Real, Andalusia, Spain
Professional category: Graduate
Start-End date: 01/04/2011 - 10/04/2011 Duration: 5 months
Type of contract: Temporary employment contract
Primary (UNESCO code): 251007 - Physical oceanography; 251010 - Shore and near shore processes.
Performed tasks: Hydrographer. Bathymetric field work Harbour and beach.
4. Employing entity: Topysub S.L
City employing entity: Puerto Real, Andalusia, Spain
Professional category: Graduate
Start-End date: 20/07/2010 - 17/12/2010 Duration: 5 months
Type of contract: Temporary employment contract

- Primary (UNESCO code): 251007 - Physical oceanography; 251010 - Shore and near-shore processes
Performed tasks: Hydrographer. Bathymetric field work Harbour and beach.
5. Employing entity: Elittoral S.L. Type of entity: Business
City employing entity: Gran Canaria, Canary Islands, Spain
Professional category: Graduate
Start-End date: 01/10/2008 - 30/11/2009 Duration: 12 months
Type of contract: Temporary employment contract
Primary (UNESCO code): 220404 - Fluid mechanics; 251001 - Biological oceanography; 251006 Ocean-bottom processes; 251007 - Physical oceanography; 251010 - Shore and near-shore processes
Performed tasks: Researcher. Subject: Sampling, Surveying and modelling in Coastal Process and Water Quality. Modelling transport and dispersion process in the water column. Monitoring the status of benthic and pelagic communities and affection by brine discharge.
6. Employing entity: Geomytsa. Geofísica Mar y Tierra S.L.
City employing entity: Madrid, Community of Madrid, Spain
Professional category: Graduate
Start-End date: 25/05/2008 - 30/07/2008 Duration: 2 months - 5 days
Type of contract: Permanent employment contract
Dedication regime: Full time
Primary (UNESCO code): 250607 - Geomorphology; 251006 - Ocean-bottom processes; 251010 -Shore and near-shore processes; 251090 - Oceanography: Marine Geology
Performed tasks: Bathymetric and Geophysics work in oceanographic cruise
7. Employing entity: Aqua y Terra Consulting S.L.
City employing entity: Barcelona, Catalonia, Spain
Professional category: Graduate Internship
Start-End date: 01/09/2007 - 30/01/2007 Duration: 2 months
Dedication regime: Full time
Primary (UNESCO code): 220504 - Fluid mechanics; 251010 - Shore and near-shore processes. Secondary (UNESCO code): 251007 - Physical oceanography; 251008 Sea-air interactions.
Performed tasks: Modelling Coastal Process, studies of wave energy utilization and tsunamis risk analysis.

4. SCIENTIFIC AND TECHNOLOGICAL EXPERIENCE

SCIENTIFIC OR TECHNOLOGICAL ACTIVITIES

Participation in projects funded through competitive calls of public or private entities

1. Name of the project: enhancing emergency management and response to extreme weather and climate events.
Entity where project took place: University of Ferrara
City of entity: Ferrara, Emilia-Romagna, Italy.
Funding entity or bodies: European commission
Start-End date: 01/01/2016 - 01/01/2020.
2. Name of the project: Resilience-increasing strategies for coasts – toolkit
Entity where project took place: Deltares Type of entity: University
City of entity: Delft, Holland
Funding entity or bodies: European commission
Start-End date: 01/11/2013 - 01/05/2017.
3. Name of the project: El contexto arqueológico subacuático de la caleta y su entorno (cadiz): puertos y pecios vertebradores de una ciudad y de un territorio.
Entity where project took place: University of Cádiz
Funding entity or bodies: Ministerio de Educación y Ciencia. Type of entity: State agency
City of entity: Cádiz, Andalusia, Spain
Start-End date: 01/01/2017 - 31/12/2018.
4. Name of the project: Estudio de la influencia de las condiciones físicas, químicas y biológicas en el deterioro y salvaguarda del patrimonio histórico subacuático
Entity where project took place: Universidad de Cádiz
Type of entity: University
Funding entity or bodies: Ministerio de Educación y Ciencia. Type of entity: State agency
City of entity: Puerto Real, Andalusia, Spain
Start-End date: 01/09/2011 - 30/06/2015.
5. Name of the project: Memves, monitoreo evaluación y modelado del vertido de salmuera
Entity where project took place: Ellitoral. S.L
Type of entity: Business
Funding entity or bodies: Agencia Canaria de Investigación Innovación y Sociedad de la Innovación. Type of entity: Regional agency
City of entity: Gran Canaria, Canary Islands, Spain
Start-End date: 01/10/2008 - 30/11/2009
6. Name of the project: Riesgos geológicos costeros asociados a eventos energéticos marinos bajo diferentes regímenes mareales marevent
Entity where project took place: University of Cadiz Type of entity: University

City of entity: Puerto Real, Andalusia, Spain

Funding entity or bodies: Ministerio de Educación y ciencia. Type of entity: State agency

Start-End date: 27/09/2007 - 27/09/2008

7. Name of the project: Análisis de vulnerabilidad costera frente a la dinámica marina: implicaciones en la gestión de la costa suratlántica española

Entity where project took place: Universidad de Cádiz Type of entity: University

Funding entity or bodies: Ministerio de Educación y Ciencia. Type of entity: State agency

City of entity: Puerto Real, Andalusia, Spain

Start-End date: 01/11/2003 - 01/11/2006

SCIENTIFIC, TECHNICAL AND/OR ASSESSMENT COMMITTEES

1. Member of the scientific committee in the international conference Technoeritage 2017

Name of the Conference: Technoeritage 2017

Organising entity: University of Cadiz Type of entity: University

City of entity: Puerto Real, Andalusia, Spain

Start-End date: 21/05/2017 - 24/05/2017.

GRANTS AND FELLOWSHIPS

1. Goal of the fellowships: Predoctoral

Name: FPI Research personnel training

Founding entity: Ministry of Science and Innovation.

Entity: University of Cádiz

City of entity: Cádiz, Spain

Duration (months): 48

Start-End date: 1/09/2011 - 01/09/2015

2. Goal of the fellowships: Doctorate

Name: EEBB: Mobility of grant research personnel training

Founding entity: Ministry of Science and Innovation.

Entity: Museo Nacional de Arqueología Subacuática. Arqua

City of entity: Cartagena, Spain.

Duration (months): 3

Start-End date: 01/10/2012 - 31/12/2012

3. Goal of the fellowships: Doctorate

Name: EEBB: Mobility of t research personnel training

Founding entity: Ministry of Science and Innovation.

Entity: University of Ulster. Institute or centre: School of Environmental sciences.

City of entity: Coreline, Northern Ireland, United Kingdom.

Duration (months): 3

Start-End date: 15/09/2013 - 16/12/2013

4. Goal of the fellowships: Doctorate
Name: EEBB: Mobility of t research personnel training
Founding entity: Ministry of Science and Innovation.
Entity: Technical University of Denmark, DTU Mekanik, Section of Coastal, Maritime and Structural Engineering.
City of entity: Lingby, Denmark
Duration (months): 3
Start-End date: 15/09/2014 - 15/12/2014
5. Goal of the fellowships: Doctorate
Name: Own founding for research activities
Founding entity: University of Cádiz.
Entity: Russian State Hydrometeorological University Type of entity: University
City of entity: San Petersburgo, Russia
Duration (months): 2
Start-End date: 21/04/2015 - 17/06/2015

OTHER RESEARCH ACTIVITIES

1. Member of the Diving Unit of Science and Technology.
Entity: University of Cadiz Type of entity: University
City of entity: Puerto Real, Andalusia, Spain
Start-End date: 01/09/2011 - 01/09/2015.
2. Participation in Ocean cruise: Zona Económica Exclusiva Española 2014
Oceanographic research vessel: Hesperides (Ministerio de Defensa)
Entity: University of Cadiz
City of entity: Puerto Real, Andalusia, Spain
Start-End date: 18/05/2014 - 03/06/2014.

5. SCIENTIFIC AND TECHNOLOGICAL ACTIVITIES

SCIENTIFIC PRODUCTION

Scientific paper

1. **Fernández-Montblanc, T.**, Benavente, J. , Theocharis A. Plomaritis. (2014). Caracterización de la inundabilidad en el estuario del río Guadalete: efecto combinado de mareas y crecidas fluviales Cuaternario y Gemorfología. 28(1-2), 27-50.
2. **Fernández-Montblanc, T.**, Quinn, R., Izquierdo, A., Bethencourt, M. (2016). Evolution of a shallow water wave-dominated shipwreck site: Fougoux (1805), Gulf of Cadiz, Geoarchaeology. 31, 487-505. DOI: 10.1002/gea.21565.

3. Cámara, B., de Buergo, M. Á., Bethencourt, M., **Fernández-Montblanc, T.**, La Russa, M. F., Ricca, M., & Fort, R. (2017). Biodeterioration of marble in an underwater environment. *Science of the Total Environment*, 609, 109-122.
4. Bethencourt, M., **Fernández-Montblanc, T.**, Izquierdo, A., González-Duarte, M. M., & Muñoz-Mas, C. (2018). Study of the influence of physical, chemical and biological conditions that influence the deterioration and protection of Underwater Cultural Heritage. *Science of The Total Environment*, 613, 98-114.
5. **Fernández-Montblanc, T.**, Del Río, L., Izquierdo, A., Gracia, F. J., Bethencourt, M., & Benavente, J. (2018). Shipwrecks and man-made coastal structures as indicators of historical shoreline position. An interdisciplinary study in the Sancti Petri sand spit (Bay of Cádiz, SW Spain). *Marine Geology*, 395, 152-167. DOI 10.1016/j.margeo.2017.10.005.
6. **Fernández-Montblanc, T.**, Izquierdo, A., Bethencourt, M. (2018). Scattered shipwreck site prospection: the combined use of numerical modelling and documentary research (Fougueux, 1805). *Archaeological and Antrophological Science*. 10,141-156. DOI 10.1007/s12520-016-0348-6.
7. González-Duarte, M. M., **Fernández-Montblanc, T.**, Bethencourt, M., & Izquierdo, A. (2017). Effects of substrata and environmental conditions on ecological succession on historic shipwrecks. *Estuarine, Coastal and Shelf Science*, 200, 301-310.
8. **Fernández-Montblanc, T.**, Izquierdo, A., Quinn, R. Bethencourt, M. (2018). Waves and wrecks: A computational fluid dynamic study in an underwater archaeological site, *Ocean Engineering*. 163, 232-250. <https://doi.org/10.1016/j.oceaneng.2018.05.062>.
9. **Fernández-Montblanc, T.**, Vousdoukas, M.I., Ciavola, P., Voukouvalas, E., Mentaschi, L., Breyiannis, G., Feyen, L., Salamon, P. (2019). Towards robust pan-European storm surge forecasting. *Ocean Modelling*. 133, 129-144. DOI <https://doi.org/10.1016/j.ocemod.2018.12.001>.

Book chapter

1. **Fernández-Montblanc, T.**, Izquierdo, A., Bethencourt, M. (2014). Underwater cultural heritage risk assessment related to mean and extreme storm events: A modelling case study in the Bay of Cadiz. In M.A. Rogerio-Candelera (Ed.) *Science, technology and cultural heritage*. pp 83-88. London: Taylor & Francis Group. ISBN: 978-1-138-02744-2.
2. **Fernández-Montblanc, T.**, Bethencourt, M., Izquierdo, A., M.M. González-Duarte. (2014). Establishing the relationship between underwater cultural heritage deterioration and marine environmental factors. A comparative analysis of the Bucentaure and Fougueux sites. In M.A. Rogerio-Candelera (Ed.) *Science, technology and cultural heritage*. pp 53-58. London: Taylor & Francis Group. ISBN: 978-1-138-02744-2.

3. Bethencourt, M, **Fernández-Montblanc, T.**, Izquierdo, A. (2014). Arqueomonitor: contribucion de las condiciones fisicas, quimicas y biologicas en el deterioro y salvaguarda del patrimonio cultural subacuatico. In X. Nieto Prieto, Xavier and M. Bethencourt (Ed.). Arqueologia subacuatica española, edition: 1st. 2, pp. 331-342. Cádiz: Editorial UCA. ISBN: 978-84-9828-472-0.

Industrial and intellectual property

- 1 Title registered industrial property: HYDROBAT
Inventors/authors/obtainers: Tomas Fernández Montblanc, Manuel Bethencourt Núñez
Entity holder of rights: University of Cádiz
Nº of application: CA-379-13
Country of inscription: Spain, Andalusia
Date of register: 28/11/2013 Conferral date: 09/02/2015.
- 2 Title registered industrial property: SURVEY-BAT
Inventors/authors/obtainers: Tomas Fernández Montblanc, Manuel Bethencourt Núñez
Entity holder of rights: University of Cádiz
Nº of application: CA-154-13
Country of inscription: Spain, Andalusia
Date of register: 16/09/2013 Conferral date: 21/01/2015

Works presented in national or international conferences

- 1 Authors: **Fernández, T.**; Benavente, J.
Title of the work: Modificacion de los patrones de corrientes asociadas al oleaje a lo largo de un ciclo mareal.
Organising entity: University of Cádiz
Name of the conference: Congreso trabajos de geomorfología en España 2006-2008 X Reunión Nacional de geomorfología.
ISBN 84-473-6226-4
City of event: Cádiz
Date of event: 14/09/2008
- 2 Authors: **Fernández T.**; Alvarez, R.; Bergasa, O.; Betancort, J.R.; Rodrigo Sanz, M.
Title of the work: Proyecto Memves: Monitoreo, Evaluacion Y Modelado Del Vertido de Salmuera.
Organising entity: Universidad de Cantabria
Name of the conference: X JORNADAS ESPAÑOLAS DE COSTAS Y PUERTOS
ISSN ISBN 978-84-86116-11-8
City of event: Santander
Date of event: 27/05/2009.
- 3 Authors: Plomaritis, T.A.; **Fernández-Montblanc, T.**; Benavente, J.;

- Title of the work: Prevision de la erosion de playas debida a temporales: comparacion entre modelos en la playa de Cádiz.
- Organising entity: Instituto de ciencias del mar del consejo superior de investigaciones científicas(ICM).
- Name of the conference: EOF 2010 I congreso Oceanografía Física española.
- City of event: Barcelona
- Date of event: 13/10/2013.
- 4 Authors: Bethencourt, M.;**Fernández-Montblanc, T.**
- Title of the work: Evaluación del estado de conservación del patrimonio arqueológico subacuático mediante las velocidades y potenciales de corrosión. protección con anodos de sacrificio.
- Organising entity: Instituto de patrimonio cultural de España.
- Name of the conference: IV Congreso latinoamericano de conservación y restauración de metal.
- NIPO: 030-13-009-5
- City of event: Madrid
- Date of event: 11/09/2011.
- 5 Authors: **Fernández-Montblanc, T.**,Bethencourt, M.
- Title of the work: Conservacion del patrimonio arqueologico subacuatico: (i) relacion entre las condiciones hidrodinamicas y de oleaje y el estado de conservacion del Fougueux y Bucentaure (1805).
- Organising entity: University of Cádiz.
- Name of the conference: III Simposio internacional en ciencias del mar.
- City of event: Cádiz
- Date of event: 27/01/2012.
- 6 Authors: **Fernández-Montblanc, T.**,Bethencourt, M.
- Title of the work: Conservacion del patrimonio arqueológico subacuático: (ii) preservación in situ de la artillería del Bucentaure 1805 mediante protección catódica.
- Organising entity: University of Cádiz.
- Name of the conference: III Simposio internacional en ciencias del mar.
- City of event: Cádiz
- Date of event: 27/01/2012.
- 7 Authors: Bethencourt, M., **Fernández-Montblanc, T.**, Izquierdo, A.
- Title of the work: Arqueomonitor: contribucion de las condiciones físicas, químicas y biológicas en el deterioro y salvaguarda del PCS. Influencia sobre las velocidades de corrosión en la artillería de dos pecios asociados a la batalla de Trafalgar (1805).
- Organising entity: Museo nacional de arqueología subacuática. Arqua
- Name of the conference: I Congreso de arqueología náutica y subacuática española.
- ISSN ISBN 978-84-9828-472-0

Pages 1064-1079

City of event: Cartagena

Date of event: 14/03/2013.

- 8 Authors: **Fernández-Montblanc, T.**, Izquierdo, A., Bethencourt, M
Title of the work: Underwater cultural heritage risk assessment related to mean and extreme storm events: a modelling case study in the bay of Cadiz
Organising Entity: Red de ciencia y tecnologia para la conservacion del patrimonio cultural
Name of the conference: International congress on science and technology for the conservation of cultural heritage.
Pages 23-24.
City of event: Sevilla.
Date of event: 24/06/2014.
- 9 Authors: **Fernández-Montblanc, T.**, Bethencourt, M., Izquierdo, A. González-Duarte, M.M.
Title of the work: Establishing the relationship between underwater cultural heritage deterioration and marine environmental factors. a comparative analysis of the Bucentaure and Fougueux sites
Organising Entity: Red de ciencia y tecnologia para la conservacion del patrimonio cultural.
Name of the conference: International congress on science and technology for the conservation of cultural heritage.
Pages 17-18.
City of event: Sevilla.
Date of event: 24/06/2014.
- 10 Authors: **Fernández-Montblanc, T.**, Bethencourt, M., Izquierdo, A.
Title of the work: Corrosion rates of metallic underwater archaeological materials: affection assessment of environmental conditions in coastal marine environment
Organising entity: Universidad de Las Palmas de Gran Canaria
Name of the conference: IV congress of marine sciences
ISSN ISBN 84-697-0471-0
Pages 53-53.
City of event: Las Palmas de Gran Canaria.
Date of event: 11/06/2014.
- 11 Authors: **Fernández-Montblanc, T.**, Izquierdo, A., Bethencourt, M
Title of the work: Modelling the oceanographic conditions during storm following the battle of Trafalgar.

- Organising Entity: Universidad de Las Palmas de Gran Canaria
Name of the conference: IV congress of marine sciences
ISSN ISBN 84-697-0471-0
Pages 65-65.
City of event: Las Palmas de Gran Canaria.
Date of event: 11/06/2014.
- 12 Authors: **Fernández-Montblanc, T.**, Bethencourt, M., Del Rio, L., Benavente, J., Gracia, F.J.
Title of the work: Study of the Fougueux wreck (1805) and the remains of the fort Lacy (1813) as indicators of paleocoastline
Organising Entity: Museo nacional de arqueología subacuática. Arqua.
Name of the conference: International congress on underwater archaeology
IKUWA V
NIPO: 030-16-446-2
Pages 406-418.
City of event: Cartagena
Date of event: 16/10/2014.
- 13 Authors: **Fernández-Montblanc, T.**, Izquierdo, A., Bethencourt, M., Mañanes, R.
Title of the work: Scattered shipwreck prospection: the combined use of numerical modelling and documentary research: Fougueux (1805).
Organising Entity: Museo nacional de arqueología subacuática. Arqua.
Name of the conference: International congress on underwater archaeology
IKUWA V
NIPO: 030-16-446-2
Pages 282-284.
City of event: Cartagena
Date of event: 16/10/2014.
- 14 Authors: Izquierdo, A., **Fernández-Montblanc, T.**, Bethencourt, M.
Title of the work: ARQUEOMONITOR: study of the influence of physical, chemical and biological conditions in the damage and protection of underwater historical heritage. constructing the bases to in situ protection
Organising Entity: Museo nacional de arqueología subacuática. Arqua.
Name of the conference: International congress on underwater archaeology
IKUWA V
NIPO: 030-16-446-2
Pages 139-150.
City of event: Cartagena
Date of event: 16/10/2014.
- 15 Authors: Ciavola, P., **Fernández-Montblanc, T.**

Title of the work: Storm surge predictions at high resolution for European case study sites: opportunities for cloud computing initiatives
Organising Entity: Vrije Universiteit Brussel
Name of the conference: Cloud computing for water science and water management
City of event: Brussel, Belgium
Date of event: 27/03/2017.

- 16 Authors: **Fernández-Montblanc, T.**, Duo, E., Ciavola, P.
Title of the work: Testing green DRR solutions by dune reconstruction at a rapidly eroding coast in the Adriatic Sea
Organising Entity: Deltares
Name of the conference: Delft software days 2017. XBeach X (10th year anniversary) conference
City of event: Delft, Netherlands
Date of event: 1/11/2017.

- 17 Authors: **Fernández-Montblanc, T.**, Ciavola, P., Vousdoukas, M.
Title of the work: Developing a storm surge early-warning system at a Pan-European scale
Organising Entity: Universite de Geneve
Name of the conference: Cloud computing for water science and water management
City of event: Riederalp, Switerland
Date of event: 21/03/2017.

- 18 Authors: Izquierdo, A., **Fernández-Montblanc, T.**, Bethencourt, M.
Title of the work: Oceanology as a tool for coastal management: underwater cultural heritage in the gulf of Cádiz.
Organising Entity: Institut of Oceanology, Research institut for the Artic and Antartic among other.
Name of the conference: Hydrometeorology and Ecology: Scientific and educational achievements, development perspectives
Pages 245-249.
City of event: San Petesburgo, Rusia
Date of event: 19/12/2017.

STAYS IN PUBLIC OR PRIVATE RESEARCH CENTRES.

- 1 Entity: Joint Research Centre Type of entity: R&D Centre
Faculty, institute or centre: Disaster Risk Management Unit. European commission.
City of entity: Ispra, Lombardia, Italy
Start-End date: 01/02/2017 - 31/01/2018 Duration: 1 year
Goals of the stay: Post-doctoral

- Provable tasks: Numerical modelling. Development and implementation of a pan-European operational forecasting system of tides, waves and storm surge.
- 2 Entity: Technical University of Denmark, DTU Mekanik, Section of Coastal, Maritime and Structural Engineering. Type of entity: University
City of entity: Lingby, Denmark
Start-End date: 15/09/2014 - 16/12/2014
Duration: 3 months
Goals of the stay: Doctorate
Provable tasks: Numerical Modelling. Computational fluid dynamics and parallel computation. Wave structure interaction. Scouring.
 - 3 Entity: Russian State Hydrometeorological University Type of entity: University
Faculty, institute or centre: Faculty of Oceanology
City of entity: San Petersburgo, Russia
Start-End date: 21/04/2015 - 17/06/2015
Duration: 1 month - 26 days
Goals of the stay: Doctorate
Provable tasks: Numerical Modelling. Computational fluid dynamics and parallel computation. Wave structure interaction. Scouring.
 - 4 Entity: University of Ulster. Institute or centre: School of Environmental sciences. Type of entity: University
City of entity: Coreline, Northern Ireland, United Kingdom.
Start-End date: 15/09/2013 - 16/12/2013
Duration: 3 months
Goals of the stay: Doctorate
Provable tasks: Multibeam, single beam echo sounder and side scan sonar data processing. Current and Wave structure interaction. Morphodynamic processes. Scouring. Numerical modelling of wave and tide.
 - 5 Entity: Museo nacional de Arqueología Subacuática ARQUA Type of entity: State agency
City of entity: Cartagena, Region of Murcia, Spain
Start-End date: 01/10/2012 - 31/12/2012 Duration: 3 months
Goals of the stay: Doctorate
Provable tasks: Study of the influence of the Environmental marine conditions in the Underwater cultural heritage conservation

5. TEACHING EXPERIENCE

Teaching activities

- 1- Entity: University of Cádiz.
Position. External lecturer

Degree: Master degree. Máster Oficial en Arqueología Náutica y Subacuática
Lecture: Ciencias y Técnicas Aplicadas.
Hours / academic course: 4
City of entity: Cadiz, Andalusia, Spain
Start-End date: 2016/2017 – onwards.

- 2- Entity: University of Cádiz.
Position. Assistant lecturer
Degree: Master degree. Máster de Oceanografía
Lecture: Buceo Científico
Hours / academic course: 12
City of entity: Cadiz, Andalusia, Spain
Start-End date: 2012-2015
- 3- Entity: University of Cádiz.
Position. Assistant lecturer
Degree: Master degree. Máster de Oceanografía
Lecture: Analysis and processing oceanographic data
Hours / academic course: 40
City of entity: Cadiz, Andalusia, Spain
Start-End date: 18/05/2014-03/06/2014;

6. COURSES AND SPECIALIZATION SEMINARS

1. Course/ Seminar Title: Introduccion a las ciencias nauticas
Organising Entity: University of Cádiz.
Hours: 90
City of entity: Puerto Real Cadiz, Andalusia, Spain
Start-End date: 20/02/2006-19/05/2006;
2. Course/ Seminar Title: Open Water Diving
Organising Entity: Acuc Center.
Hours:
City of entity: Gran Canaria, Las Palmas de Gran Canaria, Spain
Start-End date: 01/11/2008-30/11/2008.
3. Course/ Seminar Title: Technical Drawing.Autocad.
Organising Entity: University of Cádiz
Hours: 40
City of entity: Puerto Real Cadiz, Andalusia, Spain.
Start-End date: 05/05/2008-16/05/2008.

4. Course/ Seminar Title: Los sistemas de información geográfica aplicados al tratamiento de la información sobre el patrimonio arqueológico subacuático
Organising Entity: Instituto andaluz del patrimonio historico
Hours: 20
City of entity: Cadiz, Andalusia, Spain.
Start-End date: 09/05/2012-11/05/2012.
5. Course/ Seminar Title: I Seminario iberoamericano de manejo costero integrado
Organising Entity: University of Cádiz
Hours: 8
City of entity: Puerto Real Cadiz, Andalusia, Spain.
Start-End date: 24/04/2008-24/04/2008.
6. Course/ Seminar Title: 3rd Joint seminar on environment and climate change
Organising Entity: University of Cádiz
Hours: 20
City of entity: Puerto Real Cadiz, Andalusia, Spain.
Start-End date: 8/07/2013-10/07/2013.
7. Course/ Seminar Title: Disaster risk reduction for coastal areas summer school I
Organising Entity: Università degli Studi Di Ferrara.
Hours:
City of entity: Ferrara, Italy.
Start-End date: 12/09/2016-16/09/2016.
8. Course/ Seminar Title: Disaster risk reduction for coastal areas summer school II
Organising Entity: University of the Algarve.
Hours:
City of entity: Faro, Portugal.
Start-End date: 16/01/2017-20/01/2017.
9. Course/ Seminar Title: Strumenti e tecniche Matlab per il calcolo parallel, l'apprendimento automatico e l'analisi massiva dei dati.
Organising Entity: Università Degli Studi Di Palermo
Hours: 32
City of entity: Palermo, Italia.
Start-End date: 31/07/2017-4/10/2017.

7. ASSOCIATES SKILLS

Computing/Programming

- 1 Matlab for acquisition, processing and analysing field and model data.
- 2 LINUX. User level. Supercomputing platform (SLRUM). Access, download and processing of oceanographic data.

Good knowledge of various model platforms :

- 1 SCHISM (Hydrodynamics model)
- 2 WWMII (Wave propagation model)
- 3 XBEACH (Hydro- Morphodynamic model)
- 4 SWAN (Wave propagation model),
- 5 DELF3D (Hydrodynamics and Morphodynamic model),
- 6 OpenFOAM (computational fluid dynamic) ,
- 7 LISFLOOD (dynamic propagation of flood waves),
- 8 SMC(Coastal model system),
- 9 MANOLO (Advanced model nonlinear wave),
- 10 Aqualab (Hydrodynamics and waste dispersion);
- 11 COMCOT (Cornell Multi-grid Coupled Tsunami Model)

Spatial analysis and mapping.

- 1 CDO (Climate data operator),
- 2 ArcGIS
- 3 Surfer
- 4 Autocad

Fields skills

Survey and deployment experience with oceanographic and positioning equipment:

1. Waves and Current (Infinity EM y Compact EM, AWAC-ADCP, Aquadopp-ADCP, AEM-HR).
2. Oceanography: Multiparametric probe (CTD Hidronaut 305, CTD Ocean Seven 320), echo sounder Simrad EK60. Turbidimeter (Aqualogger 210). Sediment concentration profiler (AQUASCAT 1000R).
3. Hidrography: Multibeam echo sounder (RESON 8101, SIMRAD EM 2040C), single beam echo sounder (Ohmex Sonarmite v3.0, Reson Navisound 215), side scan sonar (Octopus OCTOPUS EAGETECH 272, KLEIN 595, StarFish 450F, StartFish 990F).
4. Positioning: RTK (Leica 900 RTK-DGPS , Leica 1200 RTK-DGPS.), DGPS (DGPS MAX)
5. Remotely operated underwater vehicles: ROV LVB300 Seabotix y Bleeper Praesentix.

Languages

1. English: intermediate in written and spoken
2. Italian: intermediate in written and spoken
3. Spanish: native

Autorizzo il trattamento dei dati personali contenuti nel mio curriculum vitae in base art. 13 del D. Lgs. 196/2003.

Luogo e data

Il dichiarante