Résumé of Stéphan Grilli

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Professor, Graduate School of Oceanography

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Areas of Research, Work, and Teaching :

- *Coastal Engineering* (e.g., see "The Coastal Engineering Page" (CACR); "The Coastal Engineering Research Center" (CERC)) : Water waves and ocean dynamics; modeling of wave transformations in coastal areas; wave breaking and surf-zone dynamics; wave-structure interaction (fixed and floating). Application to extreme (freak) waves, tsunamis (co-seismic and landslide), and strong wave-structure interactions. Theoretical and numerical modeling. Physical modeling. (more details in : [wave] [tsunami] [COASTMAP]).
- *Numerical modeling* : Finite and Boundary Element Method; Navier-Stokes LES; Lattice-Boltzman methods; linear/nonlinear problems; single/multi-phase flows; porous media flows; (more details in : [wave] [porous] [boom]).
- *Ocean renewable energy systems* : Modeling, experiments and field testing of renewable wave energy buoys; Environmental modeling related to wind farm siting and development

- *Porous and random media, multi-phase flows* : Flow through hydraulic porous structures; poroelasticity; stochastic random media; oil containment (more details in : [porous]).
- *Underwater acoustics* : shallow water acoustics propagation; bottom effects; theoretical and numerical modeling (more details in : [acoustics]).

Education :

- University of Liège (Belgium), M.S., 1980, Civil Engineering (highest distinction)
- Certified Professional Civil Engineer in Belgium, 1980.
- University of Liège (Belgium), M.S., 1983, Physical Oceanography (highest distinction)
- University of Liège (Belgium), Doctor Engineer (Ph.D), 1985, Hydraulic and Ocean Engineering (highest distinction)

Professional Experience :

- 1980-1985 : *Research Assistant* of the National Fund for Scientific Research (F.N.R.S., Belgium), in the Laboratories of Hydrodynamics, Applied Hydraulics and Hydraulic Constructions (L.H.C.H.) of the University of Liège (Belgium).
- 1985-1987 : *Senior Research Assistant* of the F.N.R.S., in the L.H.C.H., University of Liège (Belgium).
- 1987-1991 : *Research Associate* of the F.N.R.S.and *Research Assistant Professor* , University of Delaware , Department of Civil Engineering (Ocean Engineering Group), Newark, Delaware (USA).
- 1991-1993 : *Assistant Professor*, University of Rhode Island , Department of Ocean Engineering, Narragansett, Rhode Island (USA).
- 1993-1998 : *Associate Professor*, University of Rhode Island , Department of Ocean Engineering, Narragansett, Rhode Island (USA).
- 1996 : Appointed *Distinguished Associate Professor* of Ocean Engineering by the College of Engineering, University of Rhode Island ,(U.S.A.), as of 1/1/97.
- 1998-present : *Distinguished Professor*, University of Rhode Island , Department of Ocean Engineering, Narragansett, Rhode Island (USA), as of 7/1/98.
- 2002-2008 : *Chairman*, University of Rhode Island , Department of Ocean Engineering, Narragansett, Rhode Island (USA), from 7/1/02-6/30/08.
- 2011-present : *Professor*, University of Rhode Island , Graduate School of Oceanography, Narragansett, Rhode Island (USA), as of 4/1/11.
- 2017- : *Chairman*, University of Rhode Island , Department of Ocean Engineering, Narragansett, Rhode Island (USA), from 7/1/17-.

Short Term Positions :

- 1986 : *Invited Lecturer* for the Project A.14 : ``Maritime Constructions'' (Scientific cooperation China-Belgium), Beijing, Shangai, Wuxi, Dalian (China) September 6 to 20, 1986.
- 1986 : *Invited Lecturer* of the ``Danish Center for Applied Mathematics and Mechanics'' (DCAMM), at the Technical University of Denmark (Lyngby, Denmark), December 1 to 7, 1986.
- 1986-1987 : *Visiting Professor* at the Mohammadia School of Engineering (Rabat, Morocco), March 1 to 17, 1986 and 1987.
- 1990 : *Visiting Professor* at the Department of Water Science and Technique, University of Cantabria

(Santander, Spain), March 30 to April 9, 1990.
- 1991 : *Visiting Scholar* at the Department of Water Science and Technique, University of Cantabria (Santander, Spain), April 29 to June 15, 1991.
- 1991 : *Invited Lecturer* in the Department of Mathematics, University of Manchester (England) and *Visiting Professor* at the Wessex Institute of Technology Ashurst-Southampton, England), June 19 to July 5, 1991.
- 1993 : *Consultant in Physical Oceanography and in Ocean Engineering* for the ``United States Agency for International Development'' (USAID), in an evaluation mission of Phase III-A of the ``Cooperative Marine Technology'' program, of the ``Middle East Regional Cooperation'', Cairo, Alexandria (Egypt), Tel-Aviv, Haifa, Jerusalem (Israel), April 15 to May 7, 1993.
- 1996 : *Visiting Professor* at the Ecole Centrale de Nantes (ECN), Laboratory of Fluid Mechanics (Nantes, France), January 8 to 21, 1996.
- 1998 : *Visiting Professor* at the University of Toulon-Var , Institute for Sciences and Technology (La Garde, France), 1998-99.
- 1999 : *Visiting Scientist* at the Institut Nonlineaire de Nice (Valbonne, France), January to March, 1999.
- 2000-2017 : *Invited Professor* at the University of Toulon-Var , Institute for Sciences and Technology and Mediterranean Institute of Oceanography (La Garde, France), June-July, 2000-2005, 2007-2013, 2015-2017; September-October 2006 and 2013, January to July, 2014.
- 2005 : *Invited Professor* at the University of Braunschweig, Institute for Civil Engineering (Braunschweig, Germany), January, 2005.
- 2010 : *Invited Visiting Scholar* at the "Laboratoire d'Hydraulique Saint-Venant", Université Paris-Est and EDF - Recherche et Développement) in Chatou (France), (for three 2-week periods in January, May and December 2010).

Scientific Awards, Honors, National Committees :

- 1984 : *Award* of the ``Association Technique Maritime et Aéronautique (A.T.M.A.)'', Paris (France), for the best published work in the ATMA Bulletin.
- 1986 : *Award* of the ``Association des Amis de l'Université de Liège'', Liège (Belgium) for the best published Ph.D Dissertation.
- 1986 : *Gustave Magnel Award* of the ``Bureau pour la Sécurité des Constructions (S.E.C.O.)'', Brussels (Belgium), for the best Ph.D. Dissertation in Engineering (Biennial 1984-86).
- 1987 : *Award and Travel Grant* of the ``Duesberg-Baily Foundation'', Verviers (Belgium).
- 1990 : *Fernand de Waele Award and Travel Grant*, Bruxelles (Belgium).
- 1992 : *Vincent and Estelle Murphy Award for Excellence in Engineering*, College of Engineering, University of Rhode Island (U.S.A.).
- 2008 : *C.H. Kim Award* of the International Society of Offshore and Polar Engineers (ISOPE), ``in recognition outstanding technical achievements in and exceptional contribution to floating-body hydrodynamics.''
- 2010 : *NOAA-NTHMP Committee Member* : Appointed to serve as East Coast representative on the National Tsunami Hazard Mitigation Program ``Mapping and Modeling Sub-committee'' (MMS).
- 2010 to 2016 : *NRC Marine Board Member* : Appointed to serve for two consecutive three-year terms on the National Research Council ``Marine Board''.
- 2011 : Included in "*Marquis Who's Who in America*" 2012 (66th Edition).
- 2011 : *URI Foundation Scholarly Excellence Award* University of Rhode Island (U.S.A.).

Scientific and Professional Societies :

- *Registered Professional Civil Engineer* in Belgium, as member of the ``Association des Ingénieurs sortis de l'Université de Liège'' (A.I.L.G.), since 1980.
- *International Society for Boundary Elements* (I.S.B.E.), Ashurst Southampton (England), Member 1989-1999.
- *Center for Applied Coastal Research* (C.A.C.R.), University of Delaware, Member since 1991.
- *American Geophysical Union* (A.G.U.), Member since 1991.
- *American Society of Civil Engineers* (A.S.C.E.), Member since 1992.
- *International Association for Boundary Elements* (I.A.B.E.M.) (USA), Member 1995-2003.
- *Marine Technology Society*. (M.T.S.) (USA), Member 1996-2010.
- *The International Society of Offshore and Polar Engineers*, Cupertino, CA (I.S.O.P.E.) (USA), Member since 2000.

Editor and Editorial Boards :

- *Associate Editor* of the Journal : *Journal of Ocean Engineering and Marine Energy* (JOEME), 2014-.
- Member of the *Editorial Board* of the Journal : *Engineering Analysis with Boundary Elements* (Elsevier), 1989-2013.
- Member of the *Editorial Board* of the : *International Journal of Boundary Element Communications* (Computational Mechanics, (I.S.B.E.)), 1993-2003.
- Member of the *Editorial Board* of the Journal : *J. Waterway, Port, Coastal, and Ocean Engng.* (ASCE), 1996-2004.
- *Associate Editor* of the Journal : *Intl. J. of Offshore and Polar Engineering.* (ISOPE), 2003-2009.
- Member of the *Editorial Board* of the : *International Series on Computational Engineering* (Book series, Computational Mechanics and Elsevier), 1991-2003.
- *Associate Editor* of : *Advances in Boundary Elements* (Book series, Computational Mechanics, Elsevier), 1996-2006.
- *Guest Editor* of *Engineering Analysis with Boundary Elements* for a ``Special Issue on Nonlinear Wave Analysis'' (Volume **7**,1990).

Scientific committees :

- *Co-chairman* of BETECH90, the ``5th International Conference on Boundary Elements Technology'', University of Delaware, Newark, DE (USA), July 1990.
- *Organized* a special session on : ``Nonlinear Wave Modeling and Applications'', in BEM15, the ``15th Intl. Conf. on Boundary Elements in Engineering'', Worcester, MA, 1993.
- *Chairman* of the : ``Numerical Wave Tank Group'', of the *Intl. Offshore and Polar Engng. Conf.* series, in 2000-2002. *Vice-Chairman* then *Chairman* of the : ``Hydrodynamic Committee'', of the *Intl. Offshore and Polar Engng. Conf.* series, since 2003.
- *Co-organizer* of the ``NSF Workshop on Model Validation and Benchmarking for Tsunami Generation by Submarine Mass Failure'', University of Hawaii, Honolulu, HI (USA), May 2003.
- *Co-convener* for a Special Session at the AGU Fall Meeting (San Francisco, CA): (i) In 2005 "Interdisciplinary Studies of the 26 December 2004 Great Sumatra-Andaman Earthquake and Tsunami"; (ii) In 2012 "The March 2011 Tohoku-oki tsunami, Japan".

- *Co-organizer* of the ``NSF Workshop on air-sea interactions under tropical cyclones", University of Rhode Island, Alton Jones Campus, RI (USA), April 2010.
- Member of the *Scientific Organizing Committees* of :

1. ISOPE17, the ``27th Intl. Offshore and Polar Engng. Conf.", San Francisco, USA, 06/17;
2. JH2016, the ``2016 Journées Hydrodynamiques", Brest, France, 11/16;
3. ISOPE16, the ``26th Intl. Offshore and Polar Engng. Conf.", Rodos, Greece, 06/16;
4. ISOPE15, the ``25th Intl. Offshore and Polar Engng. Conf.", Kona, HI, USA, 06/15;
5. JH2014, the ``2014 Journées Hydrodynamiques", Val de Reuil, France, 11/14;
6. ISOPE14, the ``24th Intl. Offshore and Polar Engng. Conf.", Pusang, Korea, 06/14;
7. ISOPE13, the ``23rd Intl. Offshore and Polar Engng. Conf.", Anchorage, AK, USA, 06/13;
8. JH2012, the ``2012 Journées Hydrodynamiques", Chatou, France, 11/12;
9. ICCE33, the ``33rd Intl. Coastal Engineering Conf.", Santander, Spain, 07/12;
10. ISOPE12, the ``22nd Intl. Offshore and Polar Engng. Conf.", Rodos, Greece, 06/12;
11. ISOPE11, the ``21st Intl. Offshore and Polar Engng. Conf.", Maui, HI, 06/11;
12. ISOPE10, the ``20th Intl. Offshore and Polar Engng. Conf.", Beijing, China, 06/10;
13. ISOPE09, the ``19th Intl. Offshore and Polar Engng. Conf.", Osaka, Japan, 06/09;
14. ISOPE08, the ``18th Intl. Offshore and Polar Engng. Conf.", Vancouver, Canada, 07/08;
15. ISOPE07, the ``17th Intl. Offshore and Polar Engng. Conf.", Lisbon, Portugal, 07/07;
16. ISOPE06, the ``16th Intl. Offshore and Polar Engng. Conf.", San Francisco, California, 06/06;
17. ISOPE05, the ``15th Intl. Offshore and Polar Engng. Conf.", Seoul, Korea, 06/05;
18. BEM27, the ``27th Intl. Conf. on Boundary Elements", Orlando, FL, USA, 03/05;
19. ISOPE04, the ``14th Intl. Offshore and Polar Engng. Conf.", Toulon, France, 05/04;
20. ISOPE03, the ``13th Intl. Offshore and Polar Engng. Conf.", Honolulu, HI, USA, 05/03;
21. ISOPE02, the ``12th Intl. Offshore and Polar Engng. Conf.", KitaKyushu, Japan, 05/02;
22. ISOPE01, the ``11th Intl. Offshore and Polar Engng. Conf.", Stavanger, Norway, 06/01;
23. BEM22, the ``22nd Intl. Conf. on Boundary Elements in Engineering", Cambridge, UK, 09/00;
24. BEM20, the ``20th Intl. Conf. on Boundary Elements in Engineering", Orlando, FL, USA, 08/98;
25. COASTAL97, the ``3rd Intl. Conf. on Computer Modeling of Seas and Coastal Regions", La Coruna, Spain, 06/97;
26. BEM19, the "19th Intl. Conf. on Boundary Elements in Engineering", Rome, Italy, 09/97;
27. COASTAL95, the ``2nd Intl. Conf. on Computer Modeling of Seas and Coastal Regions", Cancun, Mexico, 09/95;
28. MOBD95, the ``3rd Intl. Conf. on Computer Modeling of Free and Moving Boundary Problems", Bled (Slovenia), 06/95;
29. BEM17, the "17th Intl. Conf. on Boundary Elements in Engineering", Madison, WI, 07/95;
30. BEM15, the "15th Intl. Conf. on Boundary Elements in Engineering", Worcester, MA, 11/93;
31. MOBD93, the ``2nd Intl. Conf. on Computer Modeling of Free and Moving Boundary Problems", Milano (Italy), 10/93;
32. BEM14, the "14th Intl. Conf. on Boundary Elements in Engineering", Seville (Spain), 11/92;
33. HYDROSOFT 92, ``the 4th Intl. Conf. on Hydraulic Engineering Software", Universidad Politecnica, Valencia (Spain) 07/92;
34. BETECH92, the ``7th Intl. Conf. on Boundary Elements Technology", Albuquerque, OK, 06/92;
35. BEM13, the "13th Intl. Conf. on Boundary Elements in Engineering", Tulsa, OK, 08/91;
36. MOBD91, the ``1st Intl. Conf. on Computer Modeling of Free and Moving Boundary Problems", Southampton (England), 07/91;
37. BETECH91, the ``6th Intl. Conf. on Boundary Elements Technology", Southampton (England),

06/91;
38. CMWR 91, the ``2nd Intl. Conf. on Comp. Meth. and Water Res.", Marrakesh (Morocco), 02/91;
39. BEM12, the ``12th Intl. Conf. on Boundary Elements", Sapporo (Japan), 09/90.

- *Papers refereed* regularly for the Journals :

1. J. Fluid Mechanics;
2. Ocean Modeling
3. Pure and Applied Geophysics
4. Landslide
5. Natural Hazard
6. Geophysical Research Letters
7. Proceedings Royal Society A
8. Applied Ocean Research;
9. J. Geophysical Res.
10. Coastal Engineering;
11. J. Waterway, Port, Coastal, and Ocean Engng.(ASCE);
12. J. Engineering Mechanics (ASCE);
13. Engineering Analysis with Boundary Elements;
14. Physics of Fluids;
15. J. Fluid Engineering (ASME);
16. Intl. J. Offshore and Polar Engng. (ISOPE);
17. Intl. J. Numerical Methods in Engng.;
18. J. Numerical Methods in Fluids;
19. Intl. Natural Hazards and Earth System Sciences.
and occasional reviewer for other journals (Marine Geology, Geology, J. Comp. Physics, Geophys. J. International, J. Phys. Oceanography, Remote Sensing of Environment, Computers and Geosciences).

- *Reviewer and/or panel reviewer* for : the NSF "Earthquake", NEES, Geophysics, and Fluid Mechanics Programs, and the University of Delaware Sea Grant College Program.

Regularly taught courses : (more details in : [courses])

1. *Introduction to Ocean Engineering* ``Ocean Waves Module" (OCE101, 1 credit undergrad. course, team taught), University of Rhode Island (USA), since 1991.
2. *Ocean Engineering Design Tools* ``Hydrodynamic/CFD Module" (OCE205, 1 credit undergraduate course, team taught), University of Rhode Island (USA), since 2005.
3. *Introduction to Engineering Wave Mechanics and Littoral Processes* (OCE307 , 3 credit undergraduate course; now OCE408, 4 credit undergraduate course), University of Rhode Island (USA), since 1992.
4. *Basic Coastal Measurements* ``Ocean Wave Laboratory Module" (OCE311, 3 credit undergraduate course, team taught), University of Rhode Island (USA), since 1992.
5. *Senior Design Project* (OCE495, 4 credit undergraduate course, team taught), University of Rhode Island (USA), since 1993.
6. *Engineering Wave Mechanics and Nearshore Processes* (OCE514, 3 credit undergraduate/graduate course), University of Rhode Island (USA), since 1993.
7. *Marine Hydrodynamics* (OCE515, 3 credit undergraduate/graduate course), University of Rhode Island

(USA), since 1996.
8. *Ocean Engineering Seminar* (OCE605, 1 credit graduate course), University of Rhode Island (USA), since 1992.
9. *Coastal Modeling* (OCE614, 3 credit graduate course), University of Rhode Island (USA), since 1992.

Formerly or temporarily taught courses :

1. *Numerical Modeling of Wave Action on Maritime Structures* (25h grad. course), University of Liege (Belgium), 1985-87.
2. *Fluid Mechanics Laboratories* (ME-306-10, 1 credit undergraduate course), University of Delaware (USA), 1989-90.
3. *Hydromechanics* (CE-639-10, 3 credit grad. course), University of Delaware (USA), 1988-89.
4. *The Boundary Element Method and its Application in Ocean Engineering* (CE-867-10, 3 credit grad. course), University of Delaware (USA), 1988-89.
5. *Coastal Modeling* (CE-667-14, 3 credit grad. course, in collaboration with R.A. Dalrymple), University of Delaware (USA), 1990-91.
6. *Hydrodynamics of Floating and Submerged Bodies I/II* (OCE-512/513, two 3 credit grad. courses), University of Rhode Island (USA), 1991-92, 1992-93.
7. *Special problems : Boundary Element Modeling of Wave Propagation* (OCE592, 3 credit graduate course), University of Rhode Island (USA), 1994-95.

Intensive and/or short courses :

1. *Intensive Course on Modeling and Management of Marine Systems*, September 1984 (8h lectures), organized by the Council of Europe at the University of Liege (Belgium).
2. *Graduate Course Series on the Boundary Element Method* (12h lectures), Free University of Brussels (Belgium), 1985-86.
3. *Maritime Hydraulics and Coastal Engineering* (in french), March 1986 and 87 (45h intensive grad. course), Mohammadia School of Engineering, Rabat (Morocco).
4. *Application of the Boundary Element Method to Wave Modeling* , April 1990 (20h short grad. course), University of Cantabria, Santander (Spain).
5. *Numerical Modeling of Nonlinear Water Waves*, June 1991 (18h short grad. course), Wessex Institute of Technology, Ashurst-Southampton (England).
6. *Introduction to Coastal Wave Dynamics* (in french), January 1996 (20h short grad. course), Ecole Centrale de Nantes, Nantes (France).
7. *Nonlinear wave shoaling theories,* July 4-8, 1998 (short course as part of the 5th WEGEMT Summer School), University of Toulon, Carqueiranne (France)
8. *Modeling of nonlinear coastal wave transformations* (in french), July 27-29, 2002 (short course as part of ``PATOM/Ecole doctorale UTV''), University of Toulon, Toulon (France).
9. *Nonlinear wave modeling, application to tsunamis, freak waves, and surf zone waves*, January 3-5, 2005, University of Braunschweig (Germany).

Students supervision and advising :

1. P. Lejeune (M.S.CE, 1983), University of Liege, 1982-83 (2D linear wave modeling)

2. J-C. Goffaux (M.S.CE, 1984), University of Liege, 1983-84 (offshore structures design)
3. J. Plancke (M.S.CE, 1985), University of Liege, 1984-85 (2D/3D linear wave modeling)
4. J-Ph. Dahlem (M.S.CE, 1986), University of Liege, 1984-85 (hydraulic structures design)
5. T. Levy (M.S.CE, 1986), University of Liege, 1985-86 (study of sailboard stability)
6. M. Lejeune (M.S.CE, 1987), University of Liege, 1986-87 (3D linear wave modeling)
7. E. Bruch (M.S.CE, 1985, Ph.D, 1989), University of Liege, 1984-1987 (2D porous media flow modeling)
8. J. Skourup (Ph.D, 1989), University of Delaware and Technical University of Denmark, 1987-89 (co-advisor) (2D nonlinear wave modeling)
9. T. Badmus (Ph.D, 1991), University of Delaware, 1988-91 (co-advisor) (3D poroelasticity modeling)
10. A.K. Otta (Ph.D, 1992), University of Delaware, 1989-92 (co-advisor) (2D nonlinear wave modeling)
11. R. Subramanya (M.S, 1994), University of Rhode Island, 1994-96 (2D nonlinear wave modeling)
12. T. Opishinski (M.S, 1996), University of Rhode Island, 1994-96 (linear coastal wave modeling)
13. M. Mahoney (M.S, 1996), University of Rhode Island, 1994-96 (wave absorption in a tank)
14. J. Knox (M.S, withdrawn), University of Rhode Island, 1993-96 (cable dynamics modeling)
15. T. Pedersen (M.S, 1996), University of Rhode Island, 1994-96 (2D shallow water acoustics modeling)
16. J. Horrillo (M.S, 1997), University of Rhode Island, 1994-97 (2D nonlinear waves modeling)
17. Dong Liang (Ph.D, withdrawn), University of Rhode Island, 1995-97 (oil containment modeling)
18. P. Guyenne (Ph.D), Institut Nonlinéaire de Nice, France 1998-2000 (co-advisor) (Nonlinear wave modeling, wave breaking)
19. T. Fake (M.S), University of Rhode Island, 1998-2000 (oil containment modeling)
20. C. Brandini (Ph.D), University of Firenze, 1998-2001 (co-advisor) (3D nonlinear wave modeling/freak waves)
21. M. Moran (M.S), University of Rhode Island, 1998-2001 (2D nonlinear wave modeling/depth inversion)
22. A. Bengston (M.S), University of Rhode Island, 1999-2001 (Fast Ships/Causeway system)
23. S. Vogelmann (M.S), University of Rhode Island, 2000-2001 (Underwater Landslide Tsunamis)
24. B. Biausser (Ph.D), University of Toulon, France 2001-2003 (co-advisor) (Breaking Wave Modeling)
25. C. Fochesato (Ph.D), Ecole Normale Supérieure, Cachan, France 2001-2004 (co-advisor) (Nonlinear wave modeling, Freak waves)
26. M. Schultz (M.S.), University of Rhode Island, 2004-2005 (Floating body dynamics, coastal waves)
27. D, Devrard (Ph.D), University of Toulon, France 2002-2006 (co-advisor) (Breaking Wave Modeling)
28. R. Gilbert (M.S.), University of Rhode Island, 2003-2005 (Wave transformations and sediment transport)
29. F. Enet (Ph.D), University of Rhode Island, 2001-2006 (Landslide Tsunamis modeling and experiments)
30. S. Maretzki (M.S.) University of Rhode Island, 2005-2006 (Tsunami Hazard mapping)
31. Y. Pérignon (M.S.) Ecole Nationale Supérieure des Ingénieurs des Etudes et Techniques d'Armement, France, 2006 (Extreme Tsunami Hazard mapping)
32. Y. Drouin (M.S) Ecole Centrale de Nantes, France, 2006 (Landslide tsunamis, microfluidics)
33. K. Moore (M.S.), University of Rhode Island, 2006-2007 (co-advisor) (Inverted Echo Sounder)
34. Jon Merrill (M.S.), University of Rhode Island, 2006-2007 (co-advisor) (Testing of wave energy buoys)
35. T. Fougere (M.S. partime), University of Rhode Island, 2006-2007 (Inverted Echo Sounder)
36. D. Gemme (M.S.), University of Rhode Island, 2006-2008 (co-advisor) (Landslide tsunamis, microfluidics)
37. N. Greene (M.S.), University of Rhode Island, 2006-2008 (Modeling of nonlinear irregular waves)

38. A. Bringer (M.S.), University of Toulon, 2008-2009 (Renewable ocean energy)
39. O. Taylor (M.S.), University of Rhode Island, 2007-2008 (co-advisor) (Underwater slope stability, landslide tsunamis, natural hazard)
40. K. Bollinger (M.S.), University of Rhode Island, 2008-2011 (co-advisor) (Microfluidics, pore pressure propagation)
41. T. Asher (M.S.), University of Rhode Island, 2008-2010 (Renewable ocean energy)
42. J. Harris (Ph.D), University of Rhode Island, 2006-2010 (M.S. 2003-2006) (Ship wave modeling; wave-induced sediment transport)
43. T. Krause (M.S.), University of Rhode Island, 2010-2011 (co-advisor) (Probabilistic landslide tsunami analysis)
44. M. Buckley, (M.S.), University of Rhode Island, 2008-2011 (Field study of tsunami deposits)
45. E. Guerber (Ph.D), University of Paris East (Laboratoire St Venant), 2009-2011 (co-advisor) (Wave energy system, wave-strucure interacitons)
46. C. Janssen (Ph.D.) Technical University of Braunschweig, Germany, 2009-2011 (co-advisor) (Lattice Boltzman modeling of breakng waves and tsunamis)
47. M. El Bettah (Ph.D), University of Rhode Island, 2006-2013 (Landslide tsunamis, microfluidics)
48. S. Dubosq (Ph.D.) University of Toulon, France, 2007-2012 (co-advisor) (M.S. 2006-2007) (Tsunami detection, remote sensing)
49. J. Montgomery (M.S.), University of Rhode Island, 2011-2013 (testing and modeling of wave energy buoy systems)
50. A. Banari (Ph.D), University of Rhode Island, 2010-2014 (Wave Breaking, air-sea interacitons)
51. T. Tajalibakhsh (Ph.D), University of Rhode Island, 2010-2014 (Tsunami generation, propagation and impact)
52. M. Shelby (M.S.), University of Rhode Island, 2014-2016 (Tsunami generation, propagation and impact; tide effects and landslide tsunamis)
53. C. O'Reilly (Ph.D student), University of Rhode Island, 2015- (Naval hydrodynamics seakeeping; LBM modeling)
54. A. Mivehchi (Ph.D student), University of Rhode Island, 2015- (Naval hydrodynamics seakeeping; BEM-FMM modeling)
55. F. Nemati (Ph.D student), University of Rhode Island, 2016- (Landslide tsunami modeling)
56. L. Schambach (Ph.D student), University of Rhode Island, 2016- (Landslide tsunami modeling)
57. P. Moran (M.S. student), University of Rhode Island, 2016- (Tsunami detection by HF radar)

Chapters, Books :

1. **Grilli**, S.T. 1985 *Experimental and Numerical Study of the Hydrodynamic Behavior of Large Self-propelled Floating Gates for Maritime Locks and Tidal-surge Barriers*. Collection des Publications de la Faculté des Sciences Appliquées de l'Université de Liège No. **99,** 447 pps, Liège, Belgium.
2. **Grilli**, S.T., C.A. Brebbia and Cheng, A.H-D. (eds.) 1990 *Computational Engineering with Boundary Elements* **Vol. 1** : Fluid and Potential Problems, 353 pps. (Proc. 5th Intl. Conf. on Boundary Element Technology, BETECH90, University of Delaware, USA, July 90). Computational Mechanics Publications, Southampton.
3. Cheng, A.H-D., Brebbia, C.A. and **Grilli**, S.T. (eds.) 1990 *Computational Engineering with Boundary Elements* **Vol. 2** : Solid and Computational Problems, 399 pps. (Proc. 5th Intl. Conf. on Boundary Element Technology, BETECH90, University of Delaware, USA, July 90). Computational Mechanics Publications, Southampton.

4. **Grilli**, S.T. and Svendsen, I.A. 1990 Computation of Nonlinear Wave Kinematics during Propagation and Runup on a Slope. Chapter in *Water Wave Kinematics* (ed. A. Torum and O.T. Gudmestad), NATO ASI Series E: Applied Sciences Vol. **178,** 387-412. Klüwer Academic Publishers, doi: http://dx.doi.org/10.1007/978-94-009-0531-3_24. [pdf] (790K)
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41. **Grilli** S.T., Tajalli-Bakhsh, T.S. , Grilli, A.R. and J. Harris 2012. Fine grid simulaitons of tsunami hazard along the Mozambique coast (pre-work). *Technical Report* for Phase III. Ocean Engineering,

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42. **Grilli** S.T., T.S. Tajalli-Bakhsh and A.R. Grilli 2013. Tsunami Run-up study along the Mozambique Coast (pre-work). *Technical Report*. Ocean Engineering, University of Rhode Island, 34 pps.
43. **Grilli** S.T. and T.S. Tajalli-Bakhsh 2013. Fine grid simulaitons of tsunami hazard at two Mozambique construction sites (after-work). *Technical Report* for Phase IV. Ocean Engineering, University of Rhode Island, 33 pps.
44. Grilli A.R. and S.T. **Grilli**, 2013. Modeling of tsunami generation, propagation and regional impact along the upper U.S east coast from the Puerto Rico trench. *Research Report no*. **CACR-13-02**. NTHMP Award, #NA10NWS4670010, National Weather Service Program Office, 18 pps. [pdf] (2.5Mb)
45. Grilli A.R. and S.T. **Grilli**, 2013. Far-Field tsunami impact on the U.S. East Coast from an extreme flank collapse of the Cumbre Vieja Volcano (Canary Island). *Research Report no*. **CACR-13-03**. NTHMP Award, #NA10NWS4670010, National Weather Service Program Office, 13 pps. [pdf] (3.5Mb)
46. Grilli A.R. and S.T. **Grilli**, 2013. Modeling of tsunami generation, propagation and regional impact along the U.S. East Coast from the Azores Convergence Zone. *Research Report no*. **CACR-13-04**. NTHMP Award, #NA10NWS4670010, National Weather Service Program Office, 20 pps. [pdf] (3.6Mb)
47. **Grilli**, S.T., C. O'Reilly and T. Tajalli-Bakhsh 2013. Modeling of SMF tsunami generation and regiobal impact alng the upper U.S. East Coast. *Research Report no*. **CACR-13-05**. NTHMP Award, #NA10NWS4670010, National Weather Service Program Office, 46 pps. [pdf] (3.1Mb)
48. Grilli A.R. and S.T. **Grilli** 2013. Fine grid simulations of tsunami hazard at two Mozambique construction sites. *Technical Report* for Phase V-A: Final assessment of Site 1. Ocean Engineering, University of Rhode Island, 31 pps.
49. Grilli A.R. and S.T. **Grilli** 2013. Fine grid simulations of tsunami hazard at two Mozambique construction sites. *Technical Report* for Phase V-A: Final assessment of Site 2. Ocean Engineering, University of Rhode Island, 30 pps.
50. King J., Baxter, C. and S.T. **Grilli** 2013. Analysis of tsunamigenic SMF hazard at two Mozambique construction sites. *Technical Report* for Phase V-B1. University of Rhode Island, 55 pps.
51. Tajalli Bakhsh, T. S., Grilli, S. T. and Grilli, A. R., 2015. Dynamic tidal effects on tsunami coastal hazard in large estuaries: Case of the Chesapeake Bay/James River, USA. *Research Report No*. **CACR-15-09**, 42 pps., Center for Applied Coastal Research, Dept. of Civil and Environmental Engineering, University of Delaware. [pdf] (3.2Mb).
52. Shelby, M., Grilli, S. T. and Grilli, A. R., 2015. Dynamic tide-tsunami interaction in the Hudson River estuary. *Research Report No*. **CACR-15-10**, 55 pps., Center for Applied Coastal Research, Dept. of Civil and Environmental Engineering, University of Delaware.
53. Kirby, J.T., F., Shi, F., S.T. **Grilli**, Nemati, F., and B. Tehranirad 2017. NTHMP Current Benchmar kWorkshop: FUNWAVE-TVD results. *Research Report no*. **CACR-16-01**. NTHMP Award, #NA14NWS4670041, National Weather Service Program Office, 82 pps. [pdf]
54. Zhang, C., Tehranirad. B., Kirby, J.T., Derakhti, M., Nemati, F. **Grilli**, S.T., Gangfeng, M. and F. Shi 2017. Tsunami Benchmark Results for the Non-Hydrostatic Wave Model NHWAVE, Version 2.0. *Research Report no*. **CACR-17-03**. NTHMP Award, #NA14NWS4670041, National Weather Service Program Office, 48 pps. [pdf]
55. Schambach, L., **Grilli**, S.T., Kirby, J.T. and F. Shi 2017. Landslide tsunami hazard along the upper US East Coast: effects of slide rheology and bottom friction *Research Report no*. **CACR-17-04**. NTHMP Award, #NA-15-NWS4670029 and NA-16-NWS4670034, National Weather Service Program Office, 40 pps.[pdf]

Research Grants :

1. Grant No. 06/25/81 (in charge of the experimental and numerical hydraulics studies, with A. Lejeune, 1981-83, $195,000) of the Institut pour la Recherche Scientifique Industrielle et en Agriculture (IRSIA.), Brussels (Belgium), to support : The Experimental Study of Self-moving Floating Tidal-surge Barriers.
2. Grant No. 85/90-82 (Co-PI in charge of the numerical studies from 1985 to 1987, with A. Lejeune, 1985-90 award $172,000 per year) of the Scientific Research Policy Ministry, Brussels (Belgium) to support the study of : The Added Mass in Hydrodynamic Phenomenons.
3. Grant (Co-PI with I.A. Svendsen, Summer 1988, $21,200) of the University of Delaware Sea Grant Program, University of Delaware (USA), to support : The 2D Modeling of Wave and Undertow Interaction in the Surf-zone.
4. Grant (Co-PI with I.A. Svendsen, Summer 1989, $22,600) of the University of Delaware Sea Grant Program, to support : The 2D Modeling of Nonlinear Wave Radiation.
5. Grant No. CRG-901019 (PI with M.A. Losada, 1991-92, $5,600) of the ``NATO Collaborative Research Grants'' Program, to support the : Numerical and Experimental Study of the Evolution of Solitary Waves over Submerged Obstacles.
6. Grant No. BCS-9111827 (PI with N. Kobayashi, 1991-92, $36,851) of the "National Science Foundation" (NSF) Engineering/Earthquake, Hazards and Mitigation Program, to support the : Documentation and Maintenance of a Numerical Software for Calculating Nonlinear Wave Runup.
7. Grant No. NA89AA/D/SG/082 (PI, 1992-93, $44,330) of the University of Rhode Island Sea Grant College Program, to support the study of : Breaking Waves on Beaches.
8. Grant (PI, 1992-93, $4,000) of the University of Rhode Island Foundation, to support the : Ocean Engineering Undergraduate Wave Laboratory.
9. Grant No. N-00014-94-I-C607 (PI, 1994-1995, $31,064) of the DOD U.S. Naval Research Laboratory (Stennis Space Center), Remote Sensing Division, to support the : Mapping of Nearshore Ocean Bottom Topography Through the Solution of Inverse Wave Propagation Problems.
10. Grant No. N-00014-94-I-0565 (PI with P. Stepanishen, 1994-1995, $36,022) of the DOD Office of Naval Research (ONR) Ocean Acoustics Division, to support the : Modeling of the Acoustic Propagation in Shallow Water Oceanic Regions Including Effects of Bottom Geometry and Sub-bottom Propagation.
11. Grant No. DTRS57-94-G-00076 (PI, 1994-1995, $97,291) of the DOT U.S. Coast Guard District No. 1 (USCG) FY94 Oil Pollution Research Grant Program, to support the : Hydrodynamic Modeling of Oil Containment.
12. Grant (Co-PI with M. Spaulding, 1994-1996, $84,000) of the URI Ocean Technology Center (OTC) : COASTWATCH : An Integrated System for Coastal Monitoring.
13. Grant No. DTRS57-95-G-00065 (PI, 1995-1996, $98,563) of the DOT U.S. Coast Guard District No. 1 (USCG) FY95 Oil Pollution Research Grant Program, to support : Numerical Modeling of Oil Containment by a Boom/Barrier system : Phase II.
14. Grant No. N-00014-96-C6012 (PI, 1996-1997, $49,987) of the DOD U.S. Naval Research Laboratory (Stennis Space Center), Remote Sensing Division : Determination of Nearshore Bottom Topography Through the Solution of Inverse Wave Propagation Problems.
15. Grant No. DTRS57-95-G-00065 of the DOI U.S. Minerals Management Service (PI, 1996-1997, $99,681) to support : Numerical Modeling of Oil Containment by a Boom/Barrier system : Phase III.
16. Grant of the Rhode Island Ocean Technology Center of Excellence (PI, 1996-1997, $30,000) to support : COASTMAP : Interface Development.

17. Grant of the College of Engineering, University of Rhode Island (1997-2002, $50,000) as part of the *Distinguished Professor* appointment.
18. Grant (Co-PI with M. Spaulding, 1997-1998, $20,000) of the URI Ocean Technology Center (OTC) : Further developments of COASTMAP : An Integrated System for Coastal Monitoring.
19. Grants (PI, $2,616 and $2,200, 1997-2000) of the University of Rhode Island Foundation, to support the : Upgrading of the Ocean Engineering Undergraduate Wave Laboratory.
20. Grant No. DTRS57-95-G-00065 of the DOI U.S. Minerals Management Service (DOI) (PI, 1998-1999, $99,784) to support : Numerical Modeling of Oil Containment by a Boom/Barrier system : Phase III/2.
21. Grant No. N-00014-99-10439 (PI, 1999-2001, $102,278) of the DOD Office of Naval Research (ONR) Ocean Science Division, to support the : Development and validation of depth-inversion algorithms for barred-beaches based on nonlinear properties of shoaling waves.
22. Grant from Vibtech Inc. (PI, 1999-2000, $15,000) to the Ocean Engineering Instrument System Laboratory, to support the : Building of an adjustable beach for wave tank tests of a causeway-FastShip system deployed in the surfzone.
23. Gift-grant from Applied Fluids Engineering Inc. (PI, 2000-2002, $34,300) to the Ocean Engineering Coastal Engineering Laboratory, to support : Fundamental Research on Tsunami Generation by Underwater Landslides and Slumps.
24. Gift-grant from from Vibtech Inc. (PI, 1/2001, $3,000) to the Ocean Engineering Coastal Engineering Laboratory, to support : Wave tank tests of a causeway-FastShip system deployed in the surfzone.
25. Gift-grant from U.S. Wave Energy Inc. (PI, 1/2001, $5,000) to the Ocean Engineering Coastal Engineering Laboratory, to support : Research in the area of Ocean Wave Energy uitlization.
26. Grant No. N-00014-01-10349 (Co-PI, 2001-2003, $249,985; URI subcontract for $50,000) of the DOD Office of Naval Research (ONR) Ocean Science Division, to support the : Studies of Mine Burial in Coastal Environment.
27. Grant No. CMS-0100223 (PI with P. Watts, 2001-04, $204,645) of the "National Science Foundation" (NSF) Engineering/Earthquake, Hazards and Mitigation Program, to support the : Case studies and tsunami community model for underwater landslide.
28. Grant of the ``Champlin Foundation'' to support : Enhancements to the R/V CT-1 as a Floating, Undergraduate Ocean Engineering Laboratory (Co-PI, 2003-04, $100,000).
29. Grant CMS-0301862 (PI, 2003, $37,000) of the ``National Sciences Foundation'' (NSF) Engineering/Earthquake, Hazards and Mitigation Program, to support a : Workshop on Model Validation and Benchmarking for Tsunami Generation by Submarine Mass Failure.
30. Grant (2003-2004, $175,581 URI subcontract for $37,668) of the DOD Office of Naval Research (ONR) Ocean Science Division, to support : Large Eddy Simulation of Sediment Transport in the Presence of Surface Gravity Waves, Currents and Complex Bedforms.
31. Grant (PI, 2003-2004, $172,506) from Ocean Dynamics Inc. : Hydrodynamic Modeling and Laboratory Experiments for the Harley SES FastShip.
32. Grant (Co-PI, 2003-2004, $49,954) from RI Renewable Energy Office : Proposed Energetech wave power plant site off Pt Judith Harbor of Refuge.
33. Grant (Steering Committee member, PIs: Robert Tyce and John King, 2004-2007, $150,000/year) from the University of Rhode Island : Partnership for Ocean Instrumentation (POI).
34. Grant of the ``Champlin Foundation'' to support : Acquisition, Installation and Operation of a Novel Underwater Acoustic Sensor Array (BEAMER) for Oceanographic Education (Co-PI, 2004-05, $107,000).
35. Grant No. N000140510068 (PI, 2004-2005, $65,439) of the DOD Office of Naval Research (ONR) Coastal Geosciences Division (code 321CG), to support : Wave Induced Mine Burial and Sediment Transport in Coastal Environment. Wave modeling studies.

36. Grant of the ``Champlin Foundation'' to support : Adapting a Pressure Recording Inverted Echo Sounder to Tsunami and Earthquake Monitoring (Co-PI, 2005-06, $96,500).
37. Grant (PI, 2004-2007, $34,500) from the University of Rhode Island Partnership for Ocean Instrumentation (POI), to support : Development of an Inverted Echo Sounder for Surface and Internal Wave Measurements in Ocean and Coastal Observatories.
38. DARPA grant : Design and Evaluation of Wave Energy Conversion Devices to Power Ocean Surveillance Systems (co-PI; $87,000; sub-contract from Rockwell Inc.; 2005-2007).
39. Grant (PI with Chris Baxter, 2005-2008, $156,706) from FMGlobal : Numerical Simulation of Tsunami Hazard Maps for the US East Coast (Phases I and II).
40. Grant No. N000140510068 (PI, 2005-2008, $146,377) of the DOD Office of Naval Research (ONR) Coastal Geosciences Division (code 321CG), to support : Wave Induced Mine Burial and Sediment Transport in Coastal Environment : Wave and sediment transport modeling studies.
41. Grant (Co-PI with Mohammad Faghri, John Grandin, Otto Gregory, Thomas Mather, Donna Meyer, Zongqin Zhang, and Christopher Baxter, 2005-2010, $2,364,000) from NSF OISE-Collaborative research Program : Partnership for International research and Education in Microfluidic Technology and applications.
42. Grant (Co-PI; 2007-2010; $450,000) for implementing the "URI Partnership for Energy".
43. Grant (Senior advisor; with Profs. A. Grilli, PI, and M.L. Spaulding; 2008-2009; $40,000) of the Office of Naval research STTR Phase I Program : Ocean Energy Extraction for Sensor Applications.
44. Grant (Co-PI with Profs. Spaulding, PI and A. Grilli, co-PI; 2008-2010; budget item: $238,547) of the State of RI Office of Energy Resources : Wave/Wind Engineering studies in support of Ocean Special Area Management Plan (SAMP).
45. Gift grant of O'Neil Corporation to support : Ocean Engineering teaching and research in the general area of wave-structure interactions, including improving OCE's wavetank equipment and infrastructure (PI; 2009; $25,000).
46. Grant (Co-PI with Profs. M.L. Spaulding, PI and A. Grilli, co-PI; 2009-2010; $100,703) of the State of RI-STAC Alliance Program : Development of a Low Loss, Direct Drive Wave Energy Conversion Device to Power Coastal Surveillance Systems.
47. Grant (PI ; 2009-2010; $345,000) of the State of RI Office of Energy Resources : High Resolution Modeling of Meteorological, Hydrodynamic, Wave and Sediment processes in SAMP study area.
48. Grant (Co-PI with Profs. M.L. Spaulding, PI and A. Grilli; 2009-2011; $174,993) of the Office of Naval research STTR Phase II Program : Ocean Energy Extraction for Sensor Applications.
49. Grant EAR-09-11499 (PI, $173,530, 2009-2013, collaboration with Prof. T. Masterlak, U. of Alabama) of the ``National Sciences Foundation'' (NSF) Geophysics Program : Collaborative research: Unraveling coseismic and postseismic deformation: A prerequisite for analyses of stress-coupling and tsunami genesis.
50. Grant OCE-09-40398 (Co-PI with Prof. T. Hara PI, and I. Ginis, Co-PI, $75,554, 2009-2010) of the ``National Sciences Foundation'' (NSF) Physical Oceanography Program : Workshop on air-sea interactions under tropical cyclones (hurricanes).
51. Grant OCE-09-27014 (Co-PI with Prof. T. Hara PI, $527,391; 2009-2013) of the ``National Sciences Foundation'' (NSF) Physical Oceanography Program : Generation of sea sprays and their impact on near surface turbulence and air-sea momentum flux.
52. Grant (co-PI with Dr. Bart Goldstein from Advanced Scientific Concepts Inc. (Santa Barbara, CA); URI budget $24,499; 2010-2011) of the Office of Naval research STTR Phase I Program : Mitigation of USV Motion via Wave Sensing ad Prediction.
53. Grant NA-10-NHS4670010 (co-PI with Prof. J.T. Kirby from University of Delaware; URI budget $290K; 2010-2014) of the "National Tsunami Hazards Mitigation Program" (NTHMP) (NOAA):

Modeling of Tsunami Inundation and Assessing Tsunami Hazards for the US East Coast (Phase 1).

54. Grant (Co-PI with Profs. M.L. Spaulding, PI and A. Grilli; 2011-2012; $105K) of the Office of Naval research STTR Phase II Option Program : Ocean Energy Extraction for Sensor Applications.
55. Supplementary grant From MEMA-NTHMP (co-PI with Prof. A. Grilli at URI, and Prof. J.T. Kirby from University of Delaware; URI budget $117,498; 2012-2013) of the "National Tsunami Hazards Mitigation Program" (NTHMP) (NOAA): Modeling of Tsunami Inundation and Assessing Tsunami Hazards for the upper US East Coast.
56. Grant (PI; 2012; $26K) of Applied Sciences Associates : tsunami hazard assessment for Oyster Creek nuclear generation station.
57. Grant (PI; 2012; $24K; Phases 1 and 2) of SAIPEM Inc. : literature review and global tsunami hazard assessment for east African Coastal Development.
58. Grant (PI with Prof. A. Grilli co-PI; 2013-2014; Phase 3 $60K, Phase 4:$16K, Phase 5: $75K; Phase 2-variant:$12K) of SAIPEM Inc. : Detailed tsunami hazard assessment for east African Coastal Development.
59. Grant (PI with Prof. A. Grilli co-PI; 2013-2014; $64K) of Applied Sciences Associates : tsunami hazard assessment for Millstone and Surry nuclear generation station.
60. Grants NA-13-NWS4670014 and NA-14-NWS4670041 (co-PI with Prof. A. Grilli at URI, and Prof. J.T. Kirby from University of Delaware; URI budget $140K; 2013-2015) of the "National Tsunami Hazards Mitigation Program" (NTHMP) (NOAA): Modeling of Tsunami Inundation and Assessing Tsunami Hazards for the lower US East Coast (Phase 2).
61. Grant No. N000141310687 (PI, with Prof. J. Dahl co-PI, 2013-2016, $439K) of the DOD Office of Naval Research (ONR) Coastal Geosciences Division (code 333), to support : Development and validation of an efficient hybrid-CFD method for fluid-structure interaction problems.
62. Grant (PI, with Prof. A. Grilli co-PI, 2014-2015, $154K) of GZA Inc. to support : tsunami hazard assessment for US powerplant station.
63. Grant CMMI-15-35568 (PI, $320K; 2015-2018; collaboration with Prof. J. Kirby University of Delaware and Prof. G. Ma, Old Dominion University) of the "National Sciences Foundation" (NSF) CMMI Engineering for Natural Hazards (ENH) Program : Collaborative Research: Development, experimental validation and case studies for the next generation of landslide tsunami models for coastal hazard mitigation.
64. Grant NA-15-NWS4670029 (co-PI with Prof. A. Grilli at URI, and Prof. J.T. Kirby from University of Delaware; URI budget $94K; 2015-2016) of the "National Tsunami Hazards Mitigation Program" (NTHMP) (NOAA): Modeling of Tsunami Inundation and Assessing Tsunami Hazards for the lower US East Coast (Phase 3).
65. Gift grant to the URI Foundation (PI, $31K, 2015-2016) of Ocean Networks Canada, University of British Columbia (Victoria) to support research on "Tsunami modeling and detection by High Frequency Radar"
66. Grant (co-PI, with Prof.s R. Hashemi, A. Grilli and J. King; $80K; 2016-2018) of the "NOAA-Seagrant Program": A comprehensive framework for understanding, predicting, and mitigating beach erosion in RI.
67. Grant (PI with A. Grilli co-PI, $98.5K, 2016-2017) of Ocean Networks Canada, University of British Columbia (Victoria) to support research on "Development of tsunami detection algorithms by HF radar applicable to the area off of Vancouver Island BC"
68. Grant No. N000141612970 (PI, with Prof. J. Dahl co-PI, 2016-2019, $360K) of the DOD Office of Naval Research (ONR) Coastal Geosciences Division (code 333), to support : Development and validation of an efficient hybrid-CFD method for fluid-structure interaction problems.
69. Grant NA-16-NWS4670034 (co-PI with Prof. A. Grilli at URI, and Prof. J.T. Kirby from University of

Delaware; URI budget $107K; 2016-2017) of the "National Tsunami Hazards Mitigation Program" (NTHMP) (NOAA): Modeling of Tsunami Inundation and Assessing Tsunami Hazards for the lower US East Coast (Phase 4).

70. Grant NA-17-NWS4670010 (co-PI with Prof. A. Grilli at URI, and Prof. J.T. Kirby from University of Delaware; URI budget $50K; 2017-2018) of the "National Tsunami Hazards Mitigation Program" (NTHMP) (NOAA): Modeling of Tsunami Inundation and Assessing Tsunami Hazards for the lower US East Coast (Phase 5).
71. Grant BCS-170005 (PI, 2018, $12K) of the NSF-XSEDE Program to support "Numerical Modeling of Tsunami Generation, Propagation, and Coastal Impact".
72. Grant N39430-18-C-2020 (co-PI with J. Dahl and A. Grilli; URI budget for base and option periods $61,912 subcontract form Creare LLC; 2018) of the Naval Facilities Engineering and Expeditionary Warfare Center: Estimation of sea state based on measured ship response.
73. Grant GEO-17-56665 (PI, $489K; 2018-2021, with A. Grilli and S. Carey co-PIs; collaboration with UK-based "Natural Environment Research Council" (NERC) project led by Prof. D. Tappin) of the "National Sciences Foundation" (NSF) Physical Oceanography and Geology Program: Caldera-forming eruption-generated tsunamis.

Presentations and Participation in International Conferences and Research Meetings /Workshops:

1. Paris (France) May 18 to 22, 1981 Presentation of a lecture : Etude numérique de l'action de la houle sur les structures flottantes, in the *Association Technique Maritime et Aéronautique* (A.T.M.A.) 81st Session.
2. Rhodes Ste Genèse (Belgium) March 1982 Participation in a one week lecture series in the *Von Karman Institute for Fluid Mechanics* : Computational Fluid Dynamics.
3. Brugge (Belgium) May 12 to 14, 1982 Presentation of a lecture : Wave Action on Floating Structures using Finite Element Method; comparison between Numerical and Experimental Results, in the *International Symposium on Engineering in Marine Environment* (S.E.M.E.).
4. Hannover (Germany) June 1982 Presentation of a lecture : Wave Action on Floating Structures and Wave Propagation using Finite Element Method, in the *4th International Conference on Finite Elements in Water Resources*.
5. Cambridge (MA, USA) July 1 to 7, 1982 Presentation of poster : Study of Wave Action on Floating Structures using Finite Elements Method. Comparison between Numerical and Experimental Results, in the *3rd International Conference on the Behavior of Off-shore Structures* (B.O.S.S.).
6. Aachen (Germany) November 23 to 25, 1982 Presentation of a lecture : Study of the Wave Action on Floating Structures by Finite Elements, in the *1st University of Liège Days in the RWTH Aachen*
7. Paris (France) March 16 to 19, 1983 Participation in the *Premier Colloque International sur les Méthodes Vectorielles et Parallèles en Calcul Scientifique*.
8. Hiroshima (Japan) November 5 to 12, 1983 Presentation of a lecture : Study of the Wave Action on Floating Structures by the Boundary Element Method. Comparison with Finite Element and Experimental Results, in the *5th International Conference on Boundary Elements*.
9. Paris (France) May 14 to 18, 1984 Presentation of a lecture : Etude de l'action de la houle sur les structures flottantes par éléments frontières. Comparaison avec les éléments finis, in the *Association Technique Maritime et Aéronautique* (A.T.M.A.) 84th Session.
10. Darmstadt (Germany) November 1 to 4, 1984 Presentation of an invited lecture in the TH Darmstadt, : Wave Action on Floating Structures by the Boundary Element Method, in the *Seminar ürber Randelement-methoden (BEM)*.

11. Liège (Belgium) November 23, 1984 Presentation of a lecture : Wave Action on Coastal Structures, in the *2nd RWTH Aachen Days at the University of Liège*.
12. Melbourne (Australia) August 18 to 24, 1985 Presentation of two lectures : (i) Open Channel Hydraulics and Water Management; (ii) Wave Action on Coastal Structures, in the *International Association for Hydraulic Research* (I.A.H.R.) 21st Congress.
13. Liège (Belgium) September 24 to 26, 1985 Presentation of a lecture : Mathematical modeling of water transport, in the *International Congress on the Continental European Poles*.
14. Loutraki (Greece) September 29 to October, 5, 1985 Presentation of a lecture : Numerical Modeling of Wave and Impact Studies in Coastal Zones (Corsican shore), in the *European Workshop on Coastal Zones*.
15. Paris (France) April 21 to 24, 1986 Presentation of a lecture : Etude du comportement hydrodynamique de grandes portes flottantes automotrices pour écluses et barrières marée-tempêtes, in the *Association Technique Maritime et Aéronautique* (A.T.M.A.) 86th Session.
16. Tokyo (Japan) September 21 to 29, 1986 Presentation of a lecture : Computation of the Fluid Flow in Zoned Anisotropic Porous Media and Determination of the Free Surface Seepage, in the *8th International Conference on Boundary Elements*.
17. Los Angeles (CA-USA) November 17 to 25, 1986 Presentation of a lecture : The Numerical Modeling of the Wave Field near the Shore by the Boundary Element Method, in the *1st International Conference on Environmental Softwares* (ENVIROSOFT86).
18. Aachen (Germany) January 5 and 6, 1987 Participation in the *7. Internationalen Wasserbau-Seminar Workshop* : ``Grundwasser-Modelle in der Praxis".
19. Kiel (Germany) January 16 to 18, 1987 Presentation of a lecture : Computation of the Transient Flow in Zoned Anisotropic Porous Media by the Boundary Element Method, in the *3rd GAMM Seminar on Panel Methods in Mechanics*.
20. Rabat (Morroco) March 12 to 26, 1988 Presentation of an invited lecture : Application of the Boundary Element Method to Some Elliptic Fluid Mechanics Problems, Chairman of a session, and presentation of a 3h tutorial : The Modeling of Highly Nonlinear Water Waves by the Boundary Element Method, in the *1st International Conference on Computer Methods and Water Resources*.
21. Southampton (England) September 3 to 10, 1988 Presentation of an invited lecture : The Modeling of Highly Nonlinear Waves : A Step Toward the Numerical Wave Tank, in the *10th International Conference on Boundary Elements*.
22. Newark (DE-USA) March 28 to 30, 1989 Presentation of a lecture in the University of Delaware : Propagation and Runup of Solitary Waves on Steep Slopes, in the *Workshop on Rational Design of Mound Structures*.
23. New York (NY-USA) November 16, 1989 : Presentation of a lecture : Generation and Reflection of Nonlinear Waves from Steep Slopes, in the H-5 *Panel (Analytic Ship Wave Relations)* of the 1989 Annual Meeting of the Society of naval Architects and Marine Engineers.
24. University Park (PA-USA) April 13 to 15, 1989 Participation in a conference at Pennsylvania State University, on *Nonlinear Phenomena in Fluid Mechanics*.
25. Oystese (Norway) May 7 to 10, 1989 Presentation of a lecture : Runup and reflection of a Solitary Wave on Steep Slopes in a Numerical Wave Tank, in the *Fourth International Workshop on Water Waves and Floating Bodies*.
26. Molde (Norway) May 22 to 25, 1989 Presentation of a lecture : Computation of Nonlinear Wave Kinematics, in the *Nato Advanced Research Workshop on Water Wave Kinematics*.
27. Newark (DE-USA) September 12 to 15, 1989 : Participation in the University of Delaware to the *Workshop on Integral and Field Equation Methods in Fluid-Structure Interactions*.
28. Cambridge (MA-USA) August 29 to 31, 1989 Presentation of two lectures : (i) The Modeling of

Nonlinear Water Wave Interaction with Maritime Structures; (ii) The Modeling of Highly Nonlinear Waves : Some Improvements to the Numerical Wave Tank, and Chairman of a session, in the *11th International Conference on Boundary Element Methods in Engineering* (BEM11).

29. Newark (DE-USA) July 10 to 12, 1990 : Co-chairman of the Conference, presentation of a lecture : Corner Effects Using BEM for Nonlinear Waves, and Chairman of a session, in the *5th International Conference on Boundary Element Technology* (BETECH90).
30. Newark (DE-USA) November 1-2, 1990 : Presentation of two lectures : (i) Characteristics of Wave Breaking Induced by Submerged Breakwaters; (ii) Computation of Highly Nonlinear Waves, in *Advances in Coastal Engineering*.
31. Catalina Island (CA-USA) August 15-17, 1990 : Presentation of two lectures : (i) Nonlinear waves on steep Slopes; (ii) The Effect of Submerged Breakwaters on Long Wave Runup, in the *International Workshop on Long wave Runup*.
32. Manchester (England) June 20-23, 1991 : Presentation of a lecture : Wave Overturning Induced by Moving Bodies with Application to Slender Ship Wave Resistance, in the Department of Mathematics, University of Manchester.
33. Southampton (England) July 2-4, 1991 : Presentation of a lecture : Wave Motion and Overturning Induced by Moving Bodies. Application to Slender Ship Wave Resistance, and Chairman of a session in the *First International Conference on Computational Modelling of Free and Moving Boundary Problems*.
34. Newport (RI-USA) February 28, 1992 : Participation in the *Canada/US Ocean Technology Conference*.
35. Newark (Delaware-USA) March 31, April 1, 1992 : Presentation of a lecture : A Numerical Model for Fully Nonlinear Waves, in the *1992 Coastal Engng. Forum and Res. Meeting* of the ``Center for Applied Coastal Research''.
36. College Station (TX-USA) May 23-27, 1992 : Presentation of a lecture : Nonlinear Shoaling and Impact of Waves on Coastal Structures, at the *9th ASCE Engineering Mechanics Conf.*.
37. Venice (Italy) October 3-10, 1992 : Presentation of a lectures : Wave Impact Forces on Mixed Breakwaters, at the *23rd Intl. Conf. on Coastal Engineering (ICCE23)*.
38. St. Johns (Newfoundland-Canada) May 22-26, 1993 : Presentation of the a lecture : Impact of Breaking Waves over Emerged and Submerged Coastal Structures, at the *8th Intl. Workshop on Water Waves and Floating Bodies*.
39. Charlottesville (VA-USA) June 5-10, 1993 : Presentation of an invited lecture : BEM Modeling of Shoaling and Breaking Waves in Coastal Areas, at the *1st SES-ASME-ASCE joint meeting (MEET'N'93)*
40. New-Orleans (LA-USA) July 25-29, 1993 : Presentation of of two lectures : (i) Wave Impact Forces on Coastal Structures; (ii) ASA.WAVES : An Interactive PC-based Wave Forecasting Tool, and Chairman of a session, at the *2nd Intl. Symposium on Ocean Wave Measurements and Analysis (WAVES93)*.
41. Worcester (Massachussets-USA) August 10-13, 1993 : Presentation of a lecture : Nonlinear Wave Modeling in very Shallow Water, and Chairman of a session, at the *15th Intl. Conf. on Boundary Elements in Engineering (BEM15)*.
42. Newark (DE-USA) September 8,9, 1993 : Presentation of a lecture : A PC-based tool for wave-refraction diffraction in coastal areas, in the *1993 Research Meeting* of the ``Center for Applied Coastal Research'' .
43. Durham (NH-USA) November 3-5, 1993 : Participation in the *Gulf of Maine Data and Information System Workshop* at the University of New Hampshire.
44. Vancouver (BC, Canada) June 6-8, 1994 : Participation in the *Oil Containment Re-evaluation workshop* organized by the US and Canadian Coast Guard.
45. Vancouver (BC, Canada) August 20-28, 1994 : Presentation of two lectures : (i) Comparison of

Modified Boussinesq and Fully Nonlinear Potential Models for Shoaling Solitary Waves; (ii) Kinematics and Properties of Fully Nonlinear Waves Shoaling and Breaking over a Gentle Slope, and Chairman of a session, at the *International Symposium on Waves - Physical and Numerical Modelling*.

46. Mauna Lani (HI, USA) July 31 to August 5, 1995 : Presentation of three lectures : (i) A hybrid DR-BEM model for underwater acoustic propagation in inhomogeneous media; (ii) A BEM model for fully nonlinear waves shoaling and breaking over a slope; (iii) One- and Two-Dimensional Probabilistic Analysis of Flow in Random Porous Media by Stochastic Boundary Elements, at the *IABEM95 Intl. Symposium*.
47. Cancun (Mexico) September 5-9, 1995 : Presentation of an invited lecture : Numerical Modeling of Wave Breaking on Beaches and over Coastal Structures, and Chairman of a session, at the *2nd Intl. Conf. on Computer Modeling of Seas and Coastal Regions*.
48. Friday Harbor (WA, USA) September 11-17, 1995 : Presentation of an invited keynote lecture : Review of Boundary Element Models for Long Wave Runup, at the *2nd. Intl. Workshop on Long-Wave Runup Models*.
49. Avery Point (New London) (CT, USA) November 14, 1995 : Presentation of an invited lecture : Modeling of Oil Containment by a Boom, at the U.S. Coast Guard *Information Transfer Meeting on High Speed Containment Systems*.
50. Calgary (Alberta, Canada) June 11-16, 1996 : Presentation of a lecture : Numerical Modeling of Oil Containment by a Boom, at the *19th Arctic and Marine Oilspill Program Tech. Seminar*.
51. Orlando (FL, USA) August 31 to September 9, 1996 : Presentation of a lecture : Fully Nonlinear Properties of Periodic Waves Shoaling over Slopes, and Chairman of a Session at the *25th Intl. Conf. on Coastal Engineering (ICCE25)*.
52. Carry-Le-Rouet (France) March 15-21, 1997 : Presentation of a lecture : Fully Nonlinear Properties of Shoaling Periodic Waves Calculated in a Numerical Wave Tank., at the *12th Intl. Workshop on Water Waves and Floating Bodies*.
53. Newark (DE. USA) April 27-29, 1997 : Presentation of a lecture : Nonlinear computation of shoaling wave properties useful for depth inversion, at the *ONR-BE meeting*.
54. Rome (Italy) September 8-12, 1997 : Presentation of an invited lecture : Computation of interfacial instabilities using a vortex sheet BEM model, at the *19th Intl. Conf. on Boundary Elements in Engineering (BEM19)*.
55. Virginia Beach (Vriginia-USA) November 2-8, 1997 : Presentation of a lecture : Depth inversion in Shallow Water based on Nonlinear Properties of Shoaling Periodic Waves, at the *WAVES97 Intl. Conf.*
56. Alphen aan den Rijn (The Netherland) March 29th to April 1, 1998 : Presentation of a lecture : Modeling of Instabilities of Oil Containment System by a Vortex Sheet Method, at the *13th Intl. Workshop on Water waves and Floating Bodies*
57. Baltimore (MD, USA) May 15-16, 1998 : Participation as invited participant in an NSF sponsored workshop on Major Research Equipment/Facilities for Tsunami/Long Wave Research.
58. Montreal (Canada) May 25-29, 1998 : Presentation of a lecture : Computation of periodic wave shoaling over barred-beaches in a fully nonlinear wave tank, at the *8th Offshore and Polar Engng. Conf.*
59. Toulon (France) September 4, 1998 : Presentation of an invited lecture : Depth inversion in shallow water based on nonlinear properties of shoaling waves, at the *5th WEGEMT Workshop on Nonlinear Wave Action on Structures and Ships*.
60. Brest (France) May 30th to June 4th, 1999 : Presentation of a lecture : A fully nonlinear BEM model for 3D overturning waves, at the *9th Offshore and Polar Engng. Conf. (ISOPE99)*.
61. San Francisco (USA) December 13 to 17, 1999 : Presentation of a lecture : Wave amplitude and runup predictions for tsunamis generated by underwater landslides, at the *AGU Fall Meeting*.

62. Seattle (USA) May 29 to June 2, 2000 : Presentation of a lecture : Modeling of overturning waves over arbitrary bottom in a 3D numerical wave tank, at the *10th Offshore and Polar Engng. Conf. (ISOPE00)*.
63. La Londe les Maures (France) July 8 to 13, 2000 : Participation in the *JONSMOD/MEDMOD Conference*.
64. Honolulu (USA) October 16 to 17, 2000, Presentation of a seminar at the University of Hawaii : Prediction of underwater landslide tsunamis in a numerical wave tank. Comparison with laboratory experiments. Visit of the *Pacific Tsunami Warning Center.*
65. Nice (France) March 25 to 30, 2001, Presentation of two lectures : Modeling of freak wave generation by 3D nonlinear wave modulation or energy focusing, and, Numerical and experimental modeling of tsunamis generated by underwater landslides, at the *26th General Assembly of the European Geophysical Society.*
66. Stavanger (Norway) June 16 to 21, 2001, Presentation of three lectures : Modeling of tsunami generation by an underwater landslide in a 3D-NWT, Modeling of freak wave generation in a 3D-NWT, and Modeling of shoaling and breaking waves in a 2D-NWT by using a spilling breaker model, at the *11th Offshore and Polar Engng. Conf. (ISOPE01)*.
67. Toulon (France) June 22, 2001 Presentation of an invited seminar at the LSEET laboratory, University of Toulon : Modeling of highly nonlinear wave phenomena in a numerical wavetank.
68. San Francisco (USA) September 3-7, 2001, Presentation of three lectures: Landslide tsunami amplitude prediction in a numerical wave tank, Three-dimensional wave focusing in fully nonlinear wave models, Implementation and validation of a breaker model in a fully nonlinear wave propagation model. At the *WAVES 2001 Intl. Conf.*
69. Anglet (France) May 15-17, 2002, Presentation of an invited keynote lecture : Nonlinear modeling of wave transformation in coastal area (in french). At the *VIIème Journées Nationales Génie Cotier Génie Civil*.
70. Paris (France) October 14-15, 2002, Invited participant in the "*Journées PATOM*" (Atmosphere/Oceanic Multiscale Program).
71. La Londe (France) April 14-18, 2003, Invited Lecture : Modelling and experiments for nonlinear coastal wave generation and transformations, in the *Summer School ``Geophysical Turbulence''* .
72. Honolulu (Hawai) May 23 to 30, 2003, Presentation of two lectures : Numerical Modeling and Experiments of Wave Shoaling over Buried Cylinders in Sandy Bottom and Computations of 3D Overturning Waves in Shallow Water, at the *13th Offshore and Polar Engng. Conf. (ISOPE03)*.
73. Paris, Nantes (France) October 17-21, 2003, Research meeting at Ecole Normale Supérieure, Cachan (Paris), and "Rapporteur" on the jury of the Ph.D defense of David LeTouzé, at Ecole Centrale de Nantes.
74. San Francisco (CA, USA) December 8-12, 2003, Presentation of an invited lecture : Tsunami landslide source models as a tool for analyzing complex case studies; and one poster: Modeling and Experimental Validation for Tsunamis Generated by Submarine Mass Failure, at the *AGU Fall Meeting*.
75. Toulon (France) May 23-28, 2004, Chairman of a Special Session and Presentation of an invited lecture : Numerical modeling and experiments for solitary wave shoaling and breaking over a sloping beach, at the *14th Offshore and Polar Engng. Conf.* (ISOPE04).
76. Toulon (France) June 18, 2004, Presentation of an invited Seminar at *LSEET-CNRS research laboratory*, University of Toulon : "Récents progrès dans la modélisation de phénomènes a surface libre non-linéaire en ingéniérie marine"
77. Sofia-Antipolis (France) June 22, 2004, Presentation of an invited Seminar at *Géosciences Azur CNRS research laboratory*, University of Nice : Modeling of nonlinear coastal waves and landslide tsunamis.

78. Toulon (France) October, 4, 2004, Presentation of an invited Seminar at *Engineering School ISITV*, University of Toulon : Recent Progress in the Modeling of Nonlinear Free Surface Phenomena and their Application to Ocean Engineering.
79. Kona (HI, USA) January 30, February 3, 2005, Participation in the *5th ONR Mine Burial Workshop*.
80. Madrid (Spain) July 3-7, 2005, Presentation of two lectures: Wave Energy Focusing in a Three-dimensional Numerical Wavetank, and Numerical Simulation of the December 26, 2004 Indian Ocean Tsunami using a Higher-order Boussinesq Model. At the *WAVES 2005 Intl. Conf.*
81. Toulon (France) and Braunschweig (Germany) September 24-29, 2005, President of a thesis Jury (ISITV) and Visit of University of Braunschweig as part of NSF-PIRE grant.
82. Tourtour (France) October 19-24, 2005, Co-organizer of "Post SEATOPS cruise Tsunami Workshop" sponsored by Foundation Les Treilles.
83. San Francisco (CA) December 4-7, 2005, Participation in AGU Fall meeting, as co-convener of session on "Interdisciplinary Studies of the 26 December 2004 Great Sumatra-Andaman Earthquake and Tsunami", president of two sessions, participant in a press conference on "Recent findings on 12/26/04 tsunami", and presenter of a lecture : Modeling of the 12/26/04 Indian Ocean Tsunami generation, propagation, and coastal impact. Integration of SEATOS Cruise and other geophysical data.
84. Edinburgh (Scotland) December 12-15, 2005, Presentation of an invited keynote lecture at the "Rogue Wave Workshop" : Fully nonlinear simulations of rogue wave generation and properties. Interactions with ocean structures.
85. San Francisco (CA) May 28-June 1, 2006, Chairman of a Special Session and presentation of an invited plenary lecture : "The 26-12-2004 Indian Ocean Tsunami: Latest Modeling, Case Studies and Perspective for Tsunami Forecasting and Mitigation.", at the *16h Offshore and Polar Engng. Conf.* (ISOPE06).
86. Providence (RI) June 6-8, 2006, Presentation of two invited lectures : "Overview of Tsunami Processes and Recent Progress in Simulations." and "Tsunami Hazard in the Atlantlic Ocean and the US East Coast -- A Stochastic Approach.", at NOAA's National Wheather Service *Tsunami Workshop for Eastern Regions*.
87. Corvallis (OR) July 26-29, 2006, Invited participant in a NSF-NEES workshop to review use of Tsunami Wave Tank. Presentation of a lecture: Review of coseismic and landslide tsunami modeling.
88. Brest (France) September 4-5, 2006, Invited to serve on the MS jury of Yves Perignon at ENSIETA Engineering school.
89. Nantes (France) October 3, 2006, Invited to serve on the MS jury of Yann Drouin at ECN Engineering school.
90. Daejon, Seoul, Pusan (Korea) November 18-25, 2006, Invited lecturer at MOERI/KORDI; Seoul National University and Pusan National University. Visit of various laboratories and presentation of 4 seminars on freak wave research, modeling, BEM-VOF coupling and modeling of wave induced sediment transport.
91. Marseille (France) November 30, 2006. President of M.-A, Pradal PhD thesis Jury at University of Marseille, School of Oceanography.
92. Nantes (France) December 7-8, 2006. President of P. Ferrant?s Research Habilitation thesis Jury at ECN, University of Nantes.
93. Toulon (France) December 14, 2006. Invited seminar on the 1 2/26/04 tsunami at the University of Toulon.
94. Braunschweig (Germany) January 14-17, 2007. Group visit of the NSF-PIRE PIs at TUB, for research coordination and discussion of dual PhD program.
95. Nantes (France) February 7-8, 2007. Invited member of B. Alessandrini's Research Habilitation thesis Jury at ECN, University of Nantes.

96. Hannover (Germany) April 22-25, 2007. Invited foreign expert participant in the ?DFG Tsunami roundtable?, to define German Research policy in this area. Presentation of a lecture on : Coastal effects of tsunamis: modeling and applications.
97. Nantes (France) May 2-3, 2007. Invited member of Romain Luquet's PhD thesis at ECN, University of Nantes.
98. Lisbon (Portugal) July 2-7, 2007. Participation in the ISOPE 2007 conference, chair of a session, TPC member and presentation of a lecture on : Computation of the wavemaking resistance of a Harley surface effect ship.
99. Perugia (Italy) July 9-14, 2007. Participation in the IUGG 2007 conference, tsunami meeting. Presentation of a lecture on tsunami hazard on the US east coast and a poster on UHF radar tsunami detection.
100. San Francisco (CA) December 11-15, 2007. Participation in AGU Fall meeting as presenter of a lecture : UHF radar signature of a tsunami approaching coastal areas: modeling, experiments and application to tsunami warning; and co-presenter of a poster: Validating a perturbation approach to the large eddy simulation of wave induced sediment transport.
101. Braunschweig (Germany) January 7-10, 2008. Group visit at TUB, of the NSF-PIRE PIs, for research coordination and work with German partners.
102. Hamburg (Germany), Aug. 29th to Sept. 6th, 2008. Participation in the ICCE31 conference, "the 32nd Conf. on Coastal Engineering". Presentation of a lecture : Modeling of wave-induced sediment transport around obstacles.
103. Nantes (France), Sept. 30th to Oct. 5th, 2008. Participation in the ICOH 2008 conference, "the 8th International Conference on Hydrodynamics". Invite Keynote lecture presentation : On the Development and Application of Hybrid Numerical Models in Nonlinear Free Surface Hydrodynamics.
104. Braunschweig (Germany) January 7-10, 2009. Visit at TUB as part of NSF-PIRE project, for research coordination and work with German partners.
105. Honolulu, HI (USA), May 29th to June 5th, 2009. Participation in the OMAE-ASME 2009 conference, "the 28th Intl. Conf. on Ocean, Offshore and Arctic Engng.". Presentation of two papers (``Modeling of the oscillatory boundary layer flow and sediment transport under steep nonlinear shoaling waves''; ``Small Buoys for Wave Energy Harvesting : Experimental and Numerical Modeling Studies'') and chair of a session.
106. Pau (France), June 9th to 12th, 2009. Participation in the MAMERN 2009 conference, "the 3rd Intl. Conf. on Approximation Methods and numerical Modeling in Environment and Natural Resources". Presentation of a keynote lecture: ``Recent progress in tsunami hazard assessment : modeling and case studies''.
107. Fall River, MA (USA), October 15th, 2009. Pariticpant in the "Marine Renewable Energy Consortium (MREC) 1st annual technical conference. Presentaiton of a lecture on: "Small Buoys for Wave Energy Harvesting : Experimental and Numerical Modeling Studies".
108. Copenhagen (Denmark), October 29th to 31st, 2009. Participation in a PhD defense committee and meeting with ``Maters of Engineering'' faculty.
109. Austin, TZ (USA), November 9th to 12th, 2009. Participation in the "4th International Conference on Submarine Mass Movements and their Consequences". Invited participant in an expert panel discussion on "Landslide Tsunami Modeling".
110. Paris (France), January 6th to 16th, 2010. Invited Visiting Scholar (as part of "Chaire Saint-Venant") at the "Laboratoire Saint-Venant" (EDF - Recherche et Développement) in Chatou to: work on joint wave energy system project, present seminars on nonlinear wave and wave-structure interaction modeling, and advise a PhD student. Presentation of an invited seminar at "Ecole Normale Superieure" in Paris: "An overview of the the Development and Application of Nonlinear Wave Models".

111. Pasadena, CA (USA), January 25th to 28th, 2010; Boulder, CO (USA), April 5th to 8th. Invited participant in "National Tsunami Hazard Mitigation Program" (NTHMP) meetings as East Coast representative and member of Modeling and Mapping sub-committee.
112. Alton Jones campus, University of Rhode Island, RI (USA), April 10th to 12th, 2010. Co-organizer of, presenter of a lecture, and discussion moderator at a "NSF-sponsored workshop on air-sea interactions under tropical cyclones".
113. Nantes, Toulon, Paris (France), May 19th to June 5th, 2010. Invited member of David LeTouzé's Research Habilitation thesis Jury at ECN, University of Nantes. Worked on research collaborations (tsunami warning system) and advised PhD student at ISITV, University of Toulon. Invited Visiting Scholar at the Laboratoire Saint-Venant (EDF - Recherche et Développement) in Chatou to: work on joint wave energy system project, and advise a PhD student.
114. Beijing (China) June 19-26, 2010. Participation in the ISOPE 2010 conference, chair of a session, TPC member and presentation of a lecture on : Development of an Efficient NWT to Assist in Large Scale Laboratory Experiments.
115. Boston, MA (USA) Nov. 1-2, 2010. Pariticpant in the "Marine Renewable Energy Consortium (MREC) 2nd annual technical conference. Presentation of a lecture on: "Small Buoys for Wave Energy Harvesting : Experimental, Numerical Modeling and Field Studies".
116. New Orleans, LA (USA) Nov. 17-19, 2010. Pariticpant in NRC Marine Board Fall meeting, as member.
117. Paris (France) December 12-24, 2010. Invited Visiting Scholar at the "Laboratoire Saint-Venant" (EDF - Recherche et Développement) in Chatou to: work on joint wave energy system project and advise a PhD student.
118. Portland, OR (USA) Jan. 31st to Feb. 3rd, 2011. Invited participant in "National Tsunami Hazard Mitigation Program" (NTHMP) meeting as East Coast representative and member of Modeling and Mapping sub-committee.
119. Nantes (France), March 22nd to March 27th, 2011. Invited member of Yves Pérignon's PhD thesis Jury at ECN, University of Nantes. Worked on research collaborations and advise a PhD student.
120. Galveston, TX (USA) March. 28th to April. 4th, 2011. Invited participant in the "National Tsunami Hazard Mitigation Program" (NTHMP) model benchmarking workshop (organized by the Modeling and Mapping sub-committee), and landslide tsunami workshop at Texas A and M University at Galveston.
121. Washington, DC (USA) April. 27-29, 2011. Pariticpant in NRC Marine Board Spring meeting, as member.
122. Toulon (France), May 21-29, 2011. Worked on research collaborations (tsunami warning system) and advised PhD student at LSEET, University of Toulon.
123. Maui, HI (USA) June 17-27, 2011. Participation in the ISOPE 2011 conference, chair of a session, TPC member and presentation of two lectures on : "Ocean wave reconstruction algorithms based on spatio-temporal data acquired by a flash LIDAR camera" and "Small Buoys for Energy Harvesting : Experimental and Numerical Modeling Studies".
124. Boulder, CO (USA), August 8th to 11th, 2011. Participates at NOAA-NCAR in the Modeling and Mapping sub-committee meeting, of the "National Tsunami Hazard Mitigation Program" (NTHMP).
125. Woodshole, MA (USA), August 18th and 19th, 2011. Invited participant in USGS-NRC meeting on landslide tsunami risk assessment.
126. Anchorage, AK (USA) Sept. 6-9, 2011. Pariticpant in NRC Marine Board Fall meeting, as member.
127. Boston, MA (USA) Sept. 16-17, 2011. Pariticpant in NSF-PIRE Geohazard meeting at Northeastern University.
128. Biarritz (France), Oct. 17-24, 2011. Invited Participant in the ``Coastal ecosystems vulnerability to

global change and extreme events'' international conference. Presentation of a lecture on the 2011 Tohoku tsunami.

129. Boston, MA (USA), Nov. 8, 2011. Invited participant in the Marine Renewable Energy Consortium (MREC) 3rd annual technical conference. Chair wave energy sessions.
130. San Francisco, CA (USA), Dec. 4-7, 2011. Participation in AGU Fall meeting as presenter of a lecture : A Monte Carlo approach for estimating tsunami hazard from submarine mass failure along the U.S. East coast; and co-presenter of two posters: Numerical simulations of the 2011 Tohoku tsunami generation, propagation and coastal impact: comparison to field observations, with sensitivity analysis to co-seismic source parameters, model type and resolution; and Coseismic deformation of the 2011 M9 Tohoku Earthquake inverted from geodetic data using FEMs: Implications for tsunami genesis and poroelastic stress-coupling.
131. Paris (France), Dec. 18-22, 2011. Invited Visiting Scholar in the ``Laboratoire Saint-Venant'' (EDF - Recherche et Développement) in Chatou to: work on joint wave energy system project and advise a PhD student.
132. San Diego, CA (USA), Feb. 6th to 9th, 2012. Participates in annual and Modeling and Mapping sub-committee meeting, of the "National Tsunami Hazard Mitigation Program" (NTHMP).
133. Washington, DC (USA) May 14-15, 2012. Pariticipant in NRC Marine Board Spring meeting, as member.
134. Rodos (Greece) June 17-23, 2012. Participation in the ISOPE 2012 conference, chair of 2 session,s TPC member and presentation of one lectures on : "Numerical simulation of the 2011 Tohoku tsunami: Comparison with field observations and sensitivity to model parameters".
135. Santander (Spain) July 1-7, 2012. Participation in the ICCE 2012 conference, technical program committee member and presentation of one lectures on : "Numerical modeling of coastal tsunami dissipation and impact".
136. Seattle, WA (USA), July 23rd to 27th, 2012. Participates in Modeling and Mapping sub-committee meeting and in the "Tsunami Hazard Workshop", of the "National Tsunami Hazard Mitigation Program" (NTHMP).
137. Jeju Island (Korea) August 18-23, 2012. Invited participant and presentation of a keynote lecture in the Geophysics of Slab Dynamics conference: "Modeling of the Toholu-Oki 2011 tsunami generation and coastal impact: a mixed co-seismic and SMF source".
138. Paris and Brest (France) November 19-28, 2012. Invited participant and presentation of a keynote lecture in the 13th Journees Hydrodynamiques (Chatou, Paris): "Recent progress in the nonlinear and dispersive modeling of tsunami generation and coastal impact: application to Tohoku 2011". Invited member of the scientific review committee of the LABEX-MER (Brest).
139. San Francisco (CA) December 2-7, 2012, Participation in AGU Fall meeting, as co-convener of sessions on "The March 2011 Tohoku-oki tsunami, Japan", president of two sessions, presenter of an invited lecture : "Modeling of the Tohoku-oki 2011 tsunami coastal hazard: effects of a mixed co-seismic and seabed failure source", co-presenter of 2 lectures: "Tsunami hazard assessment along the US east coast" and "Seafloor deformation and localized source Mechanisms of the 2011 M9 Tohoku Earthquake and tsunami", and of 3 posters: "Did submarine mass failures significantly contribute to the extreme runup of the Tohoku-oki 2011 tsunami in Sanriku", "Tsunami wave generation by solid and deformable landslides" and "Tsunami hazards on the US east coast : Inundation Mapping and Tsunami Process over a wide shelf".
140. Warwick, RI (USA), Jan. 10, 2013. Co-organizer of the Marine Renewable Energy Consortium (MREC) 4th annual technical conference. Presentation of a lecture: "Small Buoys for Wave Energy Harvesting : Overview of experimental, Numerical Modeling and Field Studies".
141. Portland, OR (USA), Jan. 27th to 30th, 2013. Participant in "National Tsunami Hazard Mitigation

Program" (NTHMP) meeting, as East Coast co-representative on the Modeling and Mapping sub-committee.

142. L'isle sur la Sorgue (France) April 6 to 9th, 2013. Participation in the 28th Intl. Workshop on Water Waves and Floating Bodies, and presentation of a lecture on: "Modeling of the Tohoku-Oki 2011 tsunami generation, far-field and coastal impact: a mixed co-seismic and SMF source".
143. Arcachon (France), June 23rd to 28th, 2013. Participation in the 7th Intl. Coastal Dynamics conference, delivery of a short course on long wave modeling, chairman of a session, and presentation of a lecture on: "On the dispersive modeling of the 2011 Tohoku tsunami generation by coseismic/SMF processes, and near- and far-field impact".
144. Seattle, WA (USA), Aug. 18th to 22nd, 2013. Participant in "National Tsunami Hazard Mitigation Program" (NTHMP) meeting, at NOAA-PMEL, as East Coast co-representative on the Modeling and Mapping sub-committee.
145. Nantes (France), October 4-5, 2013. Presentation of seminar at Ecole Centrale de Nantes: Nonlinear Ocean Wave Reconstruction Algorithms based on Spatio-Temporal Data Acquired by a Flash-Lidar Camera, and rapporteur/member of a Phd jury.
146. La Garde (France), October 10, 17 and 22, 2013. Presentaiton of three seminars at the Toulon Engineering School (ISITV) on: tsunamis, offshore wind, and offshore wave energy.
147. Nice (France), October 29-31, 2013. Participation and presentation of a lecture at the 3rd Intl. Conf. on Ocean and Coastal Observation: Sensors and observing systems, numerical models and information (OCOSS): Nonlinear ocean wave reconstruction algorithms based on simulated spatiotemporal data aquired by a Flash LIDAR camera. Washington, DC (USA) November 18-20, 2013. Pariticipant in NRC Marine Board Fall meeting, as member.
148. Toulon (France), April 16, 2014. Participation and presentation of a lecture in the 3rd Research Days of the University of Toulon: Hybrid Lattice Boltzmann Methods with GPU Acceleration for fluid structure interaction problems.
149. Washington, DC (USA) April 7-9, 2014. Pariticipant in NRC Marine Board Spring meeting, as member.
150. Seattle, WA (USA), Aug. 18-19, 2014. Participant in "National Tsunami Hazard Mitigation Program" (NTHMP) meeting, at NOAA-PMEL, as East Coast co-representative and member of Modeling and Mapping sub-committee.
151. Wakefield, RI (USA), August 20-21, 2014. Participation and progress presentation, in the semi-annual meeting of ONR Ship Hydrodnamic project, at Navatek, Ltd.
152. Bordeaux (France), August 23rd to 29th, 2014. Invited participant and keynote speaker at the "Breaking Wave Workshop", organized at the University of Bordeaux, and delivery of a lecture on; "Overview on Modeling Fully Nonlinear and Breaking Ocean Waves using potential flow and NS models".
153. Minneapolis, MI (USA), October 13th to 17th, 2014. Participation in the IMA Workshop on "Impact of Waves Along Coastlines" to give an invited lecture on: "Recent improvements in state-of-the-art models for tsunami hazard assessment: applications to both large historical and future case studies".
154. Washington, DC (USA) October 28-30, 2014. Pariticipant in NRC Marine Board Fall meeting, as member.
155. Paris, Val-de-Reuil, Toulon (France), November 16-23, 2014. Visit in EDF Chatou for research coordination, Participation in "Journee Hydrodynamique Conference" in Val de Reuil, and participation in HDR thesis jury (Dr. J. Touboul) at the Universit of Toulon.
156. San Francisco, CA (USA) December 14-19, 2014, Participation in AGU Fall meeting, and presenter of a lecture : "Development of algorithms for tsunami detection by High Frequency Radar based on modeling tsunami case studies in the Mediterranean Sea".

157. Portland, OR (USA), February 8-13, 2015. Participant in "National Tsunami Hazard Mitigation Program" (NTHMP), tsunami model validation workshop, and Spring meeting (as East Coast co-representative on the Modeling and Mapping sub-committee).
158. Honolulu, HI (USA), February 14-21, 2015. Presentation of a seminar at the University of Hawaii Ocean Resource and Engineering Department, and participation and progress presentation, in the semi-annual meeting of ONR Ship Hydrodnamic project, at Navatek, Ltd.
159. Brest (France), March 22-25, 2015. Invited member of the scientific review committee of the LABEX-MER (Brest).
160. New York, NY (USA), April 15-18, 2015. Presentation of a lecture on "Effects of severe weather: freak waves", and moderating of a panel on "Weather Informaiton Systems" at the 2015 Ferry Safety and Technology Conference.
161. Irvine, CA (USA) May 4-7, 2015. Pariticipant in NRC Marine Board Fall meeting, as member. Visit of Long Beach Harbor and related facilities.
162. New York, NY (USA), May 15, 2015. Invited expert in the "Workshop on Probabilistic Coastal Hazards Mapping for the US", at the Rockfeller Foundation.
163. Washington, DC (USA) May 19-20, 2015. Invited expert in the "Coastal Resilience Expert Meeting", at the National Academy.
164. Paris, Chatou (France), June 11 to 13, 2015. Invited member and Chair of Emmanuel Dombre's PhD thesis Jury at Laboratoire St Venant, University of Paris V. Worked on research collaborations.
165. Kona, HI (USA) June 20-27, 2015. Participation in the ISOPE 2015 conference, chair of a session, TPC member and presentation of a lecture on : Tsunami detection by HF radar system.
166. San Diego, OR (USA), July 13-16, 2015. Participant in Summer meeting (as East Coast co-representative on the Modeling and Mapping sub-committee).
167. Paris, Toulon (France), August 11 to September 6, 2015. Worked on research collaborations (naval hydrodynamics and tsunami warning systems by HF radar) and advised PhD student at MIO, University of Toulon.
168. Boston, MA (USA) September 9-11, 2015. Participation in the ASCE-COPRI Coastal Disaster 2015 conference, and presentation of a lecture on : Modeling tsunami sources and their propagation in the Atlantic Ocean for coastal tsunami hazard assessment and inundation mapping along the US East Coast.
169. London (UK) September 24-27, 2015. Invited pariticipant in the London Geological Society meeting on "Tsunami and Risk: Using the geological record". Presentation of an invited lecture on: Recent advances in modeling landslide tsunami hazard based on the geological record.
170. Washington, DC (USA) October 21-22, 2015. Pariticipant in NRC Ocean Studies Board Fall meeting, as an invited speaker.
171. Victoria, BC (Canada) October 25-28, 2015. Invited pariticipant in the Tsunami Detection by HF radar workshop at Ocean Networks Canada, University of British Columbia.
172. Washington, DC (USA) November 11-13, 2015. Pariticipant in NRC Marine Board Fall meeting, as member.
173. Boulder, CO (USA), January 31 - February 5, 2016. Participant in "National Tsunami Hazard Mitigation Program" (NTHMP), USGS workshop, and Spring meeting (as East Coast co-representative on the Modeling and Mapping sub-committee).
174. Honolulu, HI (USA), April 10-16, 2016. Participation and progress presentation, in the semi-annual meeting of ONR Ship Hydrodnamic project, at Navatek, Ltd.
175. Washington, DC (USA) April 25-27, 2016. Pariticipant in NRC Ocean Studies Board Spring meeting, as Marine Board liaison.
176. Marseilles, Toulon, Nantes (France) May 28th to June 4, 2016, Research meetings for international

collaborative a dn US-NSF projects at University of Toulon LSEET/MIO and Marseilles IRPHE. Invited to serve as rapporteur on the PhD jury of Camille Chauvigné at ECN Engineering school.

177. Woods Hole, MA (USA) June 7-9, 2016. Pariticipant in NRC Marine Board Spring meeting, as member.
178. Kingston, RI (USA) June 13-15, 2016. Pariticipant in ECM14, the "14th International Conference on Estuarine and Coastal Modeling". Co-author of 3 papers.
179. Newark, DE (USA) July 24-27, 2016. Research meeting at the University of Delaware regarding NTHMP project.
180. Bethesda, VA (USA), October 17-18, 2016. Participation and progress presentation, in the semi-annual meeting of ONR Ship Hydrodnamic project, at NSWC, Carderock.
181. Washington, DC (USA) November 8-10, 2016. Pariticipant in NRC Marine Board Fall meeting, as member.
182. Paris and Brest (France) November 19-25, 2016. Participant and presentation of a lecture in the 15th Journees Hydrodynamiques (ENSTA, Brest): "Development of a hybrid LBM-potential flow model for Naval Hydrodynamics".
183. San Francisco, CA (USA) December 11-16, 2016, Participation in AGU Fall meeting, and presenter of two posters and a lecture : "Effect of rheology on tsunami inundation caused by submarine mass failures along the US East Coast".
184. Galveston, TX (USA) Jan. 8th to 11th, 2017. Co-chair of the "National Tsunami Hazard Mitigation Program" (NTHMP) landslide tsunami model benchmarking and validaiton workshop (organized on behalf of the Modeling and Mapping sub-committee). at Texas A and M University at Galveston.
185. Portland, OR (USA), jan. 29th to Feb. 3rd, 2017. Participant in the "National Tsunami Hazard Mitigation Program" (NTHMP) annual meeting (as East Coast co-representative on the Modeling and Mapping sub-committee).
186. Paris, Chatou (France), February 16 to 19, 2017. Invited member and rapporteur of Marine Le-Gal's PhD thesis Jury at Laboratoire St Venant, University of Paris V. Worked on research collaborations.
187. Berkeley, CA (USA), May 10 to 12, 2017. Member of NSF site review team.
188. Honolulu, HI (USA), May 21-26, 2017. Participation and progress presentation, in the semi-annual meeting of ONR Ship Hydrodnamic project, at Navatek, Ltd.
189. Victoria, BC (Canada) June 11-14, 2017. Invited pariticipant in Tsunami Detection by HF radar workshop, at Ocean Networks Canada, University of British Columbia.
190. Salt Lake City, UT (USA), July 31 to Aug. 4, 2017. Participant in "National Tsunami Hazard Mitigation Program" (NTHMP) meeting, at NOAA-PMEL, as East Coast co-representative and member of Modeling and Mapping sub-committee.
191. Bethesda, VA (USA), Aug. 16, 2017. Participation and progress presentation, in review meeting for ONR Ship Hydrodnamic project, at NSWC, Carderock.
192. Paris, Toulon (France), August 21 to September 8, 2017. Worked on research collaborations (naval hydrodynamics and tsunami warning systems by HF radar) and advised PhD student at MIO, University of Toulon. Participated in PhD jury of T Altazoin at MIO.
193. Paris, Chatou (France), November 16 to 19, 2017. Invited President Habilitation thesis jury of Jeffrey Harris at Laboratoire St Venant, University of Paris V. Worked on research collaborations.
194. Seattle, WA (USA), jan. 29th to Feb. 2nd, 2018. Participant in the "National Tsunami Hazard Mitigation Program" (NTHMP) annual meeting (as East Coast co-representative on the Modeling and Mapping sub-committee).
195. Honolulu, HI (USA), February 25- March, 2018. Participation and progress presentation, in the semi-annual meeting of ONR Ship Hydrodnamic project, at Navatek, Ltd.
196. Bocca Raton, FL (USA), March 29-30, 2018. Visit of Florida Atlantic University to conduct the state-

mandated review of the "Mechanical and Ocean Engineering Department".

197. Bangor, Nottingham, UK, April 22-26, 2018. Presentation of 2 invited seminars at the "Modelling workshop" at Bangor University (FUNWAVE; Tsunami hazard modeling). Visit colleagues at British Geolological survey for start-up meeting of Krakatau tsunami project.
198. Marseille, Toulon, Paris (France), Naples (Italy), May 27 to June 29, 2018. Participation and presentation of a lecture at the "B'WAVES 2018" conference (Ecoles centrale de Marseille; May 28 to June 1). Worked on research collaborations (naval hydrodynamics and tsunami warning systems by HF radar) and advised PhD student at MIO, University of Toulon (June 4 to 23). Participation in the Iternational Engineering Board meeting and meeting at Parthenope University in Naples (June 14-16). Meeting of the International Advisory Committee of "France Energie Marine" in Paris (June 27, 28).

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