Emanuele Terrile

Curriculum Vitae

Personal Details

Status: Single
Nationality: Italian
Date of Birth: 21th January 1980
Place of Birth: Genova
Permanent Address: Via Angelo Ceppi di Bairolo 3/11, 16126 Genova, Italy
Office Address: Via Montallegro 1, 16145 Genova, Italy
Ph : +39-010-353-2497
Fax : +39-010-353-2546
Email : terrile@dicat.unige.it
Home page : www.dicat.unige.it/terrile

Education

Since Spring 2008	He is a David Crighton Fellows at the **DAMTP** (Department of Applied Mathematics and Theoretical Physics), **University of Cambridge**, working with **Prof. M.E. McIntyre** on *Generalized Lagrangian Mean models.*
01/2005 04/2008	PhD Degree in Fluid Dynamics at the D.I.C.A.T., Environmental Engineering Department, Università di Genova, Italy. Project title: *Vorticity dynamics in the nearshore flows;* Supervisor: Prof. Dr. M. Brocchini.
09/2006–12/2006	He was a PhD "Visiting Student" at the **Center for Applied Coastal Research** (CACR) at the University of Delaware, working with Prof. Jim Kirby on *Generalized Lagrangian Mean theory (GLM) applied to nearshore models.*
03/2006–05/2006	He was "Marie Curie Student" at the **Bjerknes Centre for Climate Research** and at the **Institute of Marine Research**, both Norwegian Centers of Excellence at the University of Bergen, working with Dr. Ken Drinkwater and Dr. Øystein Skagseth on *Seasonal cycle in the Norwegian Coastal Current.*
2000–2004	**Università di Genova, Faculty of Engineering.** **Laurea (Master-Degree) in Civil Engineering** (5 years curriculum and training), with **Specialization in Hydraulics.** Graduated on 23 September 2004 with full marks and

	honours: 110/110 cum Laude and printing dignity. Average marks 29.2/30 and 15 "Laudes".
01/2004–06/2004	He was a "Guest Student", supported by the EU-Socrates/Erasmus Project, at **Delft University of Technology**, Faculty of Civil Engineering – Hydraulics Section. At *Delft University of Technology* he followed the following courses: "Bed, Bank and shoreline protection", "Turbulence in hydraulics" and, in cooperation with the *UNE-SCO-IHE Institute for Water Education* and the *Utrecht University*, he followed the course in "Integrated Coastal Zone Management". Training and Master Degree Thesis: *"The threshold of motion of coarse sediment particles by regular non-breaking waves"*. Supervisor: Prof. Dr. M. Brocchini and Prof. Dr. M.J.F. Stive, advisor: Prof. Dr. H.J.Verhagen. (http://www.citg.tudelft.nl/live/binaries/4de0d195-5207-4e67-84bb-455c5403ae47/doc/2004Terrile.pdf)

Affiliations

He is member of the "Ordine degli Ingegneri di Genova".

Awards

2008	**David Crighton Fellowship 2008**, DAMTP, University of Cambridge, UK.
2006	**Marie Curie Fellowship**, Bjerknes Center, University of Bergen, Norway.
2005	**Best curriculum of study 2004**, Università di Genova, Italy.
2004	**Best curriculum of study 2003**, Università di Genova, Italy.

Working Experience

08/2007 - present	Scientific Collaborator for DEAM s.r.l. - Oceanography Consulting Company - Pisa, Italy;
1995-2005	Drawing elaborations at "Studio Ing. Terrile" in Genova;
07/2005	Drawing elaborations at D'Appolonia S.p.A., Genova.

Research Projects

2005-present	He is contributing to the Italian MIUR research project MIUR-INTERLINK-II04C02L8E , "Analisi del mescolamento delle acque costiere: dinamica dei macrovortici e formulazione lagrangiana media di modelli di circolazione";
2007-present	He is contributing to the international research project Ecors-Truc Vert 2008. Funded by the French Navy.

Invited Talks and Seminars

02/2008	**Deltares**, Delft, The Netherlands. *'Transport features of the nearshore circulation and nearbed sediment motion'.*
12/2007	**Department of Hydraulic Engineering**, Delft University of Technology, Delft, The Netherlands. *'Nearshore circulation and macrovortices'.*
11/2007	**Department of Geosciences**, University of Oslo, Oslo, Norway. *'On nearshore flow mixing: the role of macrovortices'*;
04/2006	**Bjerknes Center**, University of Bergen, Bergen, Norway. *'Vorticity dynamics of nearshore flows'.*

Teaching

03-05/2008	*Idrodynamics 1*, Universita' di Genova;
02/2008	*Water Waves*, PhD course, Universita' Politecnica delle Marche;
07/2006	*Introduction to Coastal modeling*, Universita' di Genova;

Training Courses

10/2007	*Comunication skills*, University of Edinburgh;
06/2006	*Fronts, Waves and Vortices*, Alpine Summer School, Valsavarenche, Italy.
	Fluid Mechanics, Università di Trento; *Mathematical tools* Università di Genova; *Sea Waves* Università di Genova; *Environmental transport phenomena* Università di Genova; *Nonlinear Dynamical Systems* Università di Genova; *Experimental Methods* Università di Genova; *Geophysics Fluid Dynamics* Università di Genova.

Publications

Journals Papers ("refereed")

Terrile, E., Brocchini, M., Christensen, K.H., and Kirby, J.T. (2008) *Dispersive effects on wave-current interaction and vorticity transport in nearshore flows.* Phys. Fluids, **20** (3), 036602, 8 pages;

Terrile, E., and Brocchini, M. (2007) *A dissipative point-vortex model for nearshore circulation.* J. Fluid Mech., **589** , pages 454-477;

Terrile, E., Briganti, R., Brocchini, M., and Kirby, J.T. (2006) *Topographically-induced enstrophy production/dissipation in coastal models.* Phys. Fluids, **18** (12), 126603, 25 pages;

Terrile, E., Reniers, Ad J.H.M., Stive, M.J.F., Tromp, M. and Verhagen, H.J. (2006) *Incipient motion of coarse particles under regular shoaling waves.* Coastal Engineering, **53** (1), pages 81-92.

Conference Papers ("refereed")

Terrile, E., and Brocchini, M. *Describing vortical nearshore flows by means of a dissipative Point Vortex model.* (2007b) Accepted for presentation at ICCE 2008, Hamburg, Germany;

Terrile, E. (2007a) *Modelling vortical nearshore flows and related circulation forced by a complex topography.* Proc. 32nd Congress of IAHR, JFK Student Competition, Venice, Italy;

Terrile, E., Briganti, R., Brocchini, M., and Kirby, J.T. (2006) *Produzione/ Dissipazione di enstrofia e vorticità nei modelli di circolazione costiera.* Proc. 30th Italian Conference on Hydraulics, IDRA 2006, Rome, Italy;

Terrile, E., Reniers, Ad J.H.M., and Stive, M.J.F. *Instantaneous bed shear stresses in shoaling waves.* (2006) Proc. 30th International Conference on Coastal Engineering, ICCE 2006, San Diego, California;

Stive, M.J.F., **Terrile**, E., Reniers, Ad J.H.M. and Verhagen, H.J. (2005) *Motion threshold of coarse particle under regular shoaling waves.* Proc. of Canadian Coastal Conference 2005, Dartmouth, Nova Scotia, Canada;

Stive, M.J.F., Reniers, Ad J.H.M., **Terrile**, E. and Verhagen, H.J. (2005) *Coarse particle' threshold of motion under shoaling waves.* Proc. of Coastal Dynamics 2005, Barcelona, Spain.

Submitted Papers

Terrile, E., Reniers, Ad J.H.M., and Stive, M.J.F. (2008) *Acceleration*

and skewness effects on the instantaneous bed shear stresses in shoaling waves. J.W.P.C.O.E.-ASCE (under peer review);

Christensen, K.H., and **Terrile**, E. (2008) *Drift and deformation of oil slicks due to surface waves.* J. Fluid Mech. (under peer review);

Terrile, E., Brocchini, M., and Christensen, K.H. (2008) *On the GLM horizontally-2D modelling of the nearshore circulation. Macrovortex generation.* J. Fluid Mech. (under peer review);

Foreign Languages

English: good oral and written communication

Technical Skills

Operative Systems: Linux, Windows, Mac OS X;

Working knowledge: FORTRAN, HTML;

Engineering Softwares: Matlab, Maple, LaTex, Excel, Powerpoint, Word, Acrobat, LaTex, AutoCad 2000/2002LT/R12;

Coastal/Fluvial Engineering Models: REFDIF, SHORECIRC, FUNWAVE, SWAN, ST-WAVE, HEC-RAS.

Interest and Hobbies

His interest and hobbies are: Painting, Travelling, Swimming, Athletics, Alpine Ski and Diving. He practices and has practiced the following sport activities at agonistic level: football, rowing and athletics. He volunteers for social works.

Genova, April 24, 2008

Emanuele Terrile