1) Kick of meeting – June 2014



The project has been started via the kick-off meeting held in June 2014, in Santorini, during the CSM conference. During that meeting, the first arrangements for the projects have been planned. Specifically, consortium has defined the first secondments and required modifications to the initial Gantt chart. The key joint activities have been identified considering the scientific background of each partner and the scientific interest of their members.



From left to right:

Bruno Gaspar (Instituto Superior Tecnico, Lisbon, Portugal), Michael Beer (University of Liverpool, United Kingdom), George Deodatis (Columbia University, New York, USA), Valentina Laface, Felice Arena, Alessandra Romolo (Mediterranea University, Reggio Calabria, Italy), Pol Spanos (Rice University, Houston, USA), Giovanni Malara (Mediterranea, Italy)



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2) NOEL-UNIRC – Seminar Professor Spanos (Rice University, Houston, Texas, USA)

Lectures by Prof. Pol D. Spanos



The first seminar was given by Prof. P.D. Spanos in September 2014, during his secondment in UNIRC. In this context, he worked with the ESRs and ERs on possible future developments of the project.

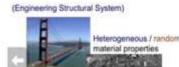


AVVISO DI SEMINARI

Venerdì 19 settembre, ore 11:30

Natural Ocean Engineering Laboratory (NOEL), lungomare Falcomatà Località Rada delle Mura Greche, Reggio Calabria

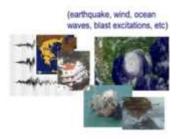




EFFICIENT MONTE CARLO SIMULATIONS FOR NONLINEAR DYNAMIC SYSTEM RESPONSES

2

EMERGING SIGNAL PROCESSING AND RESPONSE DETERMINATION TECHNIQUES IN STOCHASTIC STRUCTURAL DYNAMICS



Prof. Pol D. Spanos Lewis B. Ryon chair Rice University

In collaborazione con:

DICEAM, Università Mediterranea di Reggio Calabria, DICAM, Università degli studi di Palermo I seminari sono organizzati nell'ambito delle attività del progetto Marie Curie "LARGE MULTIPURPOSE PLATFORMS FOR EXPLOITING RENEWABLE ENERGY IN OPEN SEAS", PLENOSE, finanziato nell'ambito della action FP7-PEOPLE-2013-IRSES



Capofila: Università Mediterranea di Reggio Calabria – partners: University of Liverpool (UK); Instituto Superior Tecnico, Lisbon, (Portugal); Rice University, Houston (Texas, USA); Columbia University, New York (USA); Indian Institute of Technology of Madras (India) - Coordinatore scientifico del progetto: prof. F. Arena

PER INFORMAZIONI: CONTATTARE IL PROF. FELICE ARENA (arena@unirc.it; 3355387968)

3) Meeting at RENEW 2014 conference, Lisbon - November 2014

In November 2014, a second meeting was held in Lisbon. In this context, the partners discussed the key role of IITM within the project.

Meeting during the RENEW 2014 conference in Lisbon, 1st International Conference on Renewable Energies Offshore of partners of Mediterranea University, Instituto Superior Tecnico of Lisbon (Portugal) and Indian Institute of Technology Madras (India)



From right to left: Prof. Murali (IIT), Prof. Arena (UNIRC), Prof. Sundar (IIT), Prof. Guedes Soares (IST), Dr Romolo and Dr. Malara (UNIRC)



4) NOEL-UNIRC – Seminar Professor Murali Kantharaj (Indian Institute of Technology Madras, Chennai, India)

Professor Murali Kantharaj, Ocean Engineering Department, Indian Institute of Technology of Madras, Chennai, India gave a cycle of seminars on

CFD analysis in hydrodynamics

in the NOEL lab on December 1-2-3, 2014.



Martedì 2 dicembre 2014, ore 10 Mercoledì 3 dicembre 2014, ore 10

Natural Ocean Engineering Laboratory (NOEL), lungomare Falcomată Località Rada delle Mura Greche, Reggio Calabria

CFD analysis in hydrodynamics

Prof. Murali Kantharaj

Ocean Engineering Department Indian Institute of Technology of Madras Chennai, India

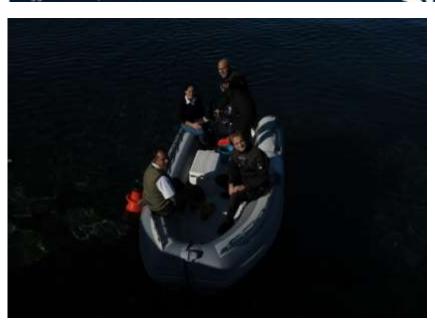
I seminari sono organizzati nell'ambito delle attività del progetto Marie Curie "LARGE MULTIPURPOSE PLATFORMS FOR EXPLOITING RENEWABLE ENERGY IN OPEN SEAS*, PLENOSE, finanziato nell'ambito della action FP7-PEOPLE-2013-IRSES



Capofila: Università Mediterranea di Reggio Calabria - partners: University of Liverpool (UK), Instituto Superior Tecnico, Lisbon, (Portugal), Rice University, Houston (Texas, USA), Columbia University, New York (USA), Indian Institute of Technology of Madras (India) - Coordinatore scientifico del progetto: prof. F. Arena PER INFORMAZIONI: CONTATTARE IL PROF. FELICE ARENA (arena@unirc.it, 3355387968)

NOEL, Professor Murali Kantharaj Reggio Calabria, www.noel.unirc.it





5) Seminar Professor V. Sundar (Indian Institute of Technology Madras, Chennai, India)

In April 2015, Prof. Sundar moved from IITM to IST cooperating with the ER and ESR of IST. During this secondment, he has short staying in UNIRC, where he gave a seminar on

Post-facto evaluation of coastal protection measures of the tsunami 2004 affected Indian coast



6) Columbia University. June 2015.

Secondment of Dr. Edoardo Patelli, from the University of Liverpool to Columbia University of New York.

He gave a seminar on

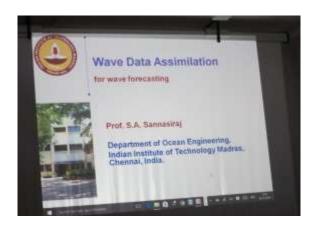
"Analysis of Systems in Presence of Aleatory and Epistemic Uncertainty."



7) NOEL-UNIRC – Seminar Professor Sannasiraj S A (Indian Institute of Technology Madras, Chennai, India)

Seminar Prof. Sannasiraj S A – December 18, 2015– Title: Wave Data Assimilation

http://www.plenose.unirc.it/activity/plenose-seminar/









8) Indian Institute of Technology Madras, Chennai, India. Secondment of Professor Felice Arena from NOEL-UNIRC

March- April 2016. Course on "Extreme Waves in Ocean Engineering", gave within the GIAN program.

http://www.plenose.unirc.it/activity/gian-course-extreme-waves-in-ocean-engineering/

Extreme Waves in Ocean Engineering







Dates for the Course Host Institute No. of Credits 21st March 2016 to 1st April 2016

Indian Institute of Technology Madras, Chennai, India

2

Course Faculty



Felice Arena is Professor in Ocean Engineering and Director of the Natural Ocean Engineering Laboratory (NOEL www.noel.unirc.it) at Mediterranea University of Reggio Calabria (Italy).



Prof. S.A. Sannasiraj is a faculty of Department of Ocean Engineering, Indian Institute of Technology Madras.

9) NOEL-UNIRC – Seminar Professor Spanos (Rice University, Houston, Texas, USA)

Project Marie Curie PLENOSE: lecture of Professor Pol Spanos in the NOEL Secondment of Professor Pol Spanos from RICE University, Texas, USA at NOEL, UNIRC – July 19, 2016. For details see:

Il prof. Pol D. Spanos Lewis B. Ryon chair Rice University

terrà un seminario dal titolo

STOCHASTIC MECHANICS an open discussion with young researchers

Martedì 19 luglio 2016, ore 10,00



10) UNIRC - Seminar Professor V. Sundar (Indian Institute of Technology Madras, Chennai, India)

Marie Curie PLENOSE: Lecture of Professor Sundar, from Indian Institute of Technology Madras, Chennai, India.

Title:

'ADAPTATION TO NATURAL COASTAL HAZARDS AND SHORELINE MANAGEMENT PLANCASE STUDIES

Tuesday October 11, 2016, at 9:15A.M. in the "Aula dell'ex Consiglio della Facoltà di Ingegneria, fifth floor, Università Mediterranea di Reggio Calabria

 $\underline{http://www.plenose.unirc.it/activity/marie-curie-plenose-seminario-del-prof-sundar-v-lecture-of-professor-\underline{sundar/}}$



11) University of Lisbon, IST. PLENOSE Meeting of UNIRC, IST, IIT Madras durign the 2nd International Conference on Renewable Energies Offshore

24-26 October 2016 - Lisbon

http://www.plenose.unirc.it/activity/2nd-international-conference-on-renewable-energies-offshore/





2nd International Conference on Renewable Energies Offshore

RENEW 2016

24 - 26 October 2016 IST Congress Centre Lisbon, Portugal

12) NOEL-UNIRC - Seminar Professor V. Sundar (Indian Institute of Technology Madras, Chennai, India)

June 22, 2017, at 10,30, the Natural Ocean Engineering Laboratory.

AN APPRAISAL ON OCEAN ENERGY IN THE INDIAN CONTEXT

by Professor Sundar V. from Indian Institute of Technology Madras, Chennai, India

 $\underline{http://www.plenose.unirc.it/activity/an-appraisal-on-ocean-energy-in-the-indian-context-professor-sundar-v-from-indian-institute-of-technology-madras-chennai-india/$



13) NOEL-UNIRC. Professor Pol Spanos: POTENT METHODS FOR NONLINEAR STOCHASTIC MECHANICS

Secondment of professor Pol Spanos (RICE University, USA) at NOEL – July 12, 2017. Seminar on "POTENT METHODS FOR NONLINEAR STOCHASTIC MECHANICS"

For details see:

 $\underline{http://www.plenose.unirc.it/activity/prof-pol-spanos-potent-methods-for-nonlinear-stochastic-mechanics/pol-spanos-pol-spanos$





14) NOEL-UNIRC. Short-course "Stochastic Dynamics Techniques for Civil Engineering" given by Dr. Ioannis A. Kougioumtzoglou, from Columbia University of New York, during his Secondment at NOEL, UNIRC – July 2017

http://www.plenose.unirc.it/activity/short-course-stochastic-dynamics-techniques-for-civil-engineering/





15) UNIRC - Seminar Professor Sriram V. (Indian Institute of Technology Madras, Chennai, India)

Lecture on "Numerical modelling in ocean engineering", by Sriram V., Assistant Professor in IIT Madras Secondment of Dr. Sriram V. at NOEL – **July 26, 2017**

 $\underline{http://www.plenose.unirc.it/activity/lecture-on-numerical-modelling-in-ocean-engineering-by-sriram-v-assistant-professor-in-iit-madras/$







16) Seminar by Professor Felice Arena, UNIRC at Columbia University of New York

with title:

OCEAN WAVES: theoretical modelling, field experiments and energy exploitation

Secondment of Professor Felice Arena from Mediterranea University to Columbia University of New York – September 5, 2017

For details see:

http://www.plenose.unirc.it/activity/seminar-by-professor-felice-arena-at-columbia-university-of-new-york/

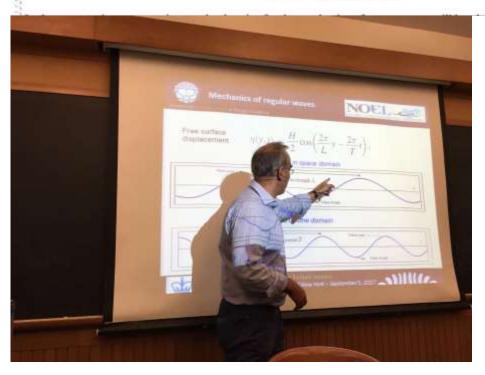
Department of Civil Engineering and Engineering Mechanics Columbia University

Ocean Waves: Theoretical Modelling, Field Experiments and Energy Exploitation



Felice Arena Mediterranea University of Reggio Calabria

> Tuesday, September 5, 2017 Time: 2:30PM-3:30PM Location: 411 Hamilton Hall



17) Indian Institute of Technology Madras, Chennai, India: meeting with colleagues from University of Liverpool-

Organized in Chennai, IIT Madras, in November 2017

Within PLENOSE Project a meeting was organized at the end of 2017 between researchers from UoL and IIT MAdras in Chennai

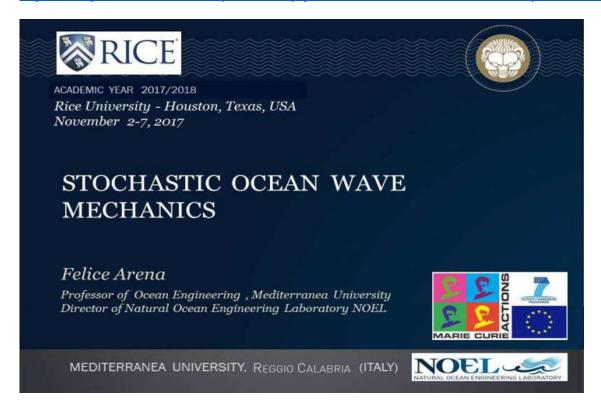
http://www.plenose.unirc.it/activity/meeting-between-uol-and-iit-madras-in-chennai/

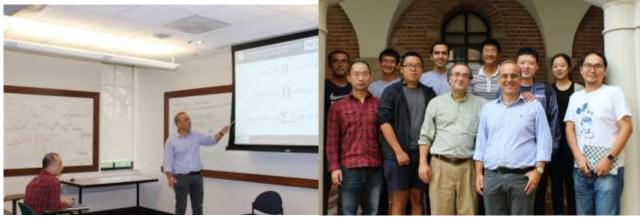


18) Seminar by Professor Felice Arena at Rice University (Houston, Texas, USA)

Secondment of Professor Felice Arena from Mediterranea University to RICE University, Texas, USA – November 2-7. 2017

http://www.plenose.unirc.it/activity/seminar-by-professor-felice-arena-at-rice-university-houston-texas-usa/





19) Project Marie Curie PLENOSE: lecture of Dr. Nilanjan Saha in the NOEL

Secondment of Dr. Nilanjan at NOEL - 2017.

Seminar on

"Numerical analysis of Offshore Wind Turbines, with emphasis on Extremes"

For details see:

http://www.plenose.unirc.it/activity/project-marie-curie-plenose-lecture-of-dr-nilanjan-saha-in-the-noel/



20) PLENOSE Meeting during the 4th International Conference in Ocean Engineering (ICOE 2018)

A PLENOSE meeting was organized during the 4th International Conference in Ocean Engineering (ICOE 2018) in Chennai.

People from UNIRC, IST and IIT Madras attended the meeting.

Theme: Emerging Opportunities and Challenges 18th – 21st February, 2018 | Chennai, India.

For details see:

http://www.plenose.unirc.it/activity/the-noel-participates-to-the-4th-international-conference-in-ocean-engineering-icoe-2018/

http://www.icoe.co.in/









21) PLENOSE Final meeting during the CSM conference in Paros – June 2018



