

## STAB 2012 CONFERENCE VENUE

### ROYAL OLYMPIC HOTEL



334 Athanasiou Diakou, Athens 117 43  
Tel: +30 210 9288400, Fax: +30 210 9233317  
Session Rooms: Panorama, Attica & Callirhoe



## HOW TO REACH THE VENUE FROM THE ATHENS INTERNATIONAL AIRPORT

### By METRO

Take the blue line (No 3) from airport's metro station. At the Syntagma station, switch to the red line (No 2) in the direction of Ag. Dimitrios. Get off at the first stop (Acropolis station). The venue is approximately 200m away, walking along the Athanasiou Diakou Street. The time from the Athens International Airport to the Royal Olympic Hotel is about 50 minutes. The last train of the day leaves the airport at 23:30 (first train in the morning heading to the airport leaves the Syntagma station at 05:53; and first train from Acropolis station to Syntagma is at 05:37). Metros' fare to- and from the airport is € 8. The ticket can be used for transfers in the metro's network and also in busses, within 90 minutes from its validation.

### By BUS

The X95 bus ("Airport Express") links the airport with the Syntagma Square. The bus station is right in front of the Arrivals Terminal (doors 3 and 4). The trip to Athens' centre lasts for a little over an hour, depending on the traffic. There is service all day round (less frequently during the night). The € 5 ticket allows also transfers to other means of public transportation in Athens, if used within 90 minutes. At Syntagma you take metro's red line, in the direction of Ag. Dimitrios and leave the train at the first stop (Acropolis station). The average total time to the Venue is approximately 75 minutes.

### By TAXI

Taxis' queue begins right in front of Door 4 of the Arrivals Terminal. A taxi ride to the Venue should cost about 35 – 40 Euro during the day but this doubles after midnight. On average it takes about 30 minutes.

## REGISTRATION

Registration will take place at Callirhoe Room's Entrance Hall (Royal Olympic Hotel) on Sunday 23<sup>rd</sup> of September, 17:30 – 20:00; and on Monday 24<sup>th</sup> of September, 08:00 – 09:00. Of course, late comers who will arrive after Monday morning will still be possible to register.

## IMPORTANT NUMBERS

**STAB organizers:** Kostas Spyrou, STAB 2012 Chairman: +30 6974450695  
Lilia Sbokos, appointed Agent of STAB 2012: +30 6944260900 (coordination)  
Katerina Ximeraki: +30 6948059735 (contact for booking enquiries)

**Emergency numbers:** Police: 100; Medical Emergency: 112; Ambulance: 166; Fire Department: 199;  
Tourist Police: 171; Information: 14944

## INFORMATION ABOUT THE HOST CITY OF STAB 2012



Athens is the southernmost capital on the European mainland, spreading across the central plain of Attica and surrounded by four mountains: Aegaleo to the west, Parnitha to the north (the tallest of the four, with 1,414 m), Penteli to the northeast and Hymettus to the east. The Saronic Gulf is to the southwest. The city is built around a number of hills that can be easily accessed from the Venue. The highest is Lycabettus with 277 m. Athens municipality has a population of 655,780 people, occupying 39 km<sup>2</sup>. It forms the core of Greater Athens, comprised of 35 municipalities. Since ancient times, Athens' faith has been linked to the nearby natural port of Piraeus, one of the largest in the Mediterranean and host of several Greek shipping companies. The

port of Piraeus is the primary gate to the islands of central, east and southern Greece. The Athens Metropolitan Area covers an area of 2,928.717 km<sup>2</sup> and its population exceeds 4,000,000 people.

Athens is home to two UNESCO World Heritage sites: the Acropolis and the medieval Daphni Monastery. However, numerous monuments worth a visit are found almost everywhere, evidence of the 3,500 - year history of the city. Besides its ancient glory, modern Athens has a lot more to delight its visitors, with a vibrant cosmopolitan life enjoyed throughout the year. Only a few meters from the Venue begins the lively pedestrian Dionyssiou Areopagitou Street passing in front of the Acropolis and ending at Thessalon. To its left and right are some of the most prominent remnants of classical Athens. Nearby is also the Syntagma Square, the central square of Athens, lying in front of the House of the Greek Parliament. From Syntagma Square begins Ermou Street that leads to Monastiraki, one of Athens' most traditional shopping streets. At the Eleftherios Venizelos Avenue [mostly known however as Panepistimiou (i.e. University's) Street], is the "Attica" department store and several upmarket designer stores. Just beneath the Acropolis is the district of Plaka, one of the most scenic of the city. Famous for its plentiful neoclassical architecture, it is a traditionally prime tourist destination, with a number of picturesque tavernas and live performances. Nearby Monastiraki is known for its string of small shops and crowded flea market; but also for its popular tavernas specializing in souvlaki. Another neighbouring district, well - known for its student - crammed, stylish cafés, is Thessalon. Located a few hundred meters to the west of Monastiraki, it is next to the Ancient Agora and is home to the Temple of Hephaestus. But in the same area are found also a 11th Century Byzantine church and a 15th Century Ottoman mosque. Kolonaki is the area at the base of Lycabettus hill and it is at about 1300 meters distance from the Venue. Traditionally regarded as one of the most prestigious areas of the capital, it is full of boutiques, bars and trendy restaurants. A wide range of art galleries and museums are also found here.

The weather in September in Athens is usually pleasant with average temperature in the mid 20s (°C), humidity 55% and more than 8 hours of sunshine daily. Access to the coast (with beaches suitable for swimming) and to other areas of the city is easy by a generally efficient public transportation system comprised of a metro, busses, trolleybuses, a commuter rail service and a tram. Integrated tickets for all modes (valid for 90 minutes) cost €1.40; while single – mode, single - ride tickets (only for buses, trolley-buses and tram) cost €1.20. Daily tickets for all modes cost €4, and weekly tickets for all modes cost €14. Tickets for busses are bought at kiosks or at special booths and they need to be validated inside the bus.

## THE ORGANIZING INSTITUTION



The National Technical University (NTUA) is the oldest and most prestigious educational institution of Greece in the field of technology. Established as a Royal School of Arts in 1837, it includes nowadays nine Schools with about 700 academic staff, 8500 undergraduate students and 1500 postgraduates. Its original campus is located in municipal Athens next to the Archaeological Museum; but the new campus is at the suburb of Zographos, below the Hymettus mountain.

The School of Naval Architecture and Marine Engineering is one of the largest in Europe and worldwide. With a faculty of 28, it accommodates a broad spectrum of expertise and is very active in research internationally.

## STAB 2012 SYNOPSIS

Time	Day	Sunday	Monday			Tuesday		Wednesday	Thursday	Friday			
07:00 - 08:00								Conference cultural tour					
08:00 - 09:00			Registration										
09:00 - 09:30			Welcome addresses										
09:30 - 10:00			Keynotes: IMO/SLF & INTERCARGO			S 3.1	S 3.2		S 3.3	Keynotes: Industry's views of stability and safety	GOALDS	S 10.1	
10:00 - 10:30												S 11.1	
10:30 - 11:00			Coffee break						Coffee break				
11:00 - 11:30											Coffee break		
11:30 - 12:30			S 1.1	S 1.2	S 4.1	S 4.2	S 4.3		S 7.1	S 7.2	S 7.3	GOALDS	Workshop: IMO intact stability criteria
12:30 - 13:00			Lunch						Lunch				
13:00 - 14:00													
14:00 - 15:30			ISC meeting	S 2.1	S 2.2	S 2.3	S 5.1		S 5.2	S 5.3	S 8.1	S 8.2	S 8.3
15:30 - 16:00				Coffee break			Coffee break				STAB 2012 Closing addresses		
16:00 - 17:00		Excursion to Cape Sounion followed by dinner			S 6.1	S 6.2	S 6.3	S 9.1	S 9.2	S 9.3	GOALDS		
17:00 - 17:30													
17:30 - 18:00					SRDC meeting								
18:00 - 19:30													
19:30-20:00	Registration												
20:00 - 21:00	Welcome reception								Guided tour of Acropolis Museum followed by Gala Dinner and presentation of STAB prize				
21:00 - 22:30													
22:30 - 24:00													

## STAB 2012 PROGRAMME

Time / Day	Sunday September 23 <sup>th</sup>		
14:00 - 17:30	ISC meeting		Chair: <i>deKat</i>
17:30 - 20:00	Registration		
20:00 - 21:00	Welcome reception		
Time / Day	Monday September 24 <sup>th</sup>		
08:00 - 09:00	Registration		
09:00 - 10:30	Opening session ( <i>Attica</i> )    Chairs: <i>Yannoulis &amp; Tzabiras</i>		
09:00 - 09:30	Welcome addresses		
09:30 – 10:30	Keynotes - <b>Zbigniew Szozda</b> , <i>Chairman of IMO/SLF</i> —IMO developments on ship stability and fishing vessel safety - <b>Rob Lomas</b> , <i>INTERCARGO Secretary General</i> – Cargo liquefaction		
	Coffee break		
11:00-12:30	Session 1.1: Probabilistic and risk - based assessment of ship stability ( <i>Panorama</i> ) <i>Chairs: Francescutto &amp; Backalov</i>	Session 1.2: Damage stability of passenger and cargo ships ( <i>Attica</i> ) <i>Chairs: Papanikolaou &amp; Shiraishi</i>	
11:00 - 11:30	Development of a new methodology to predict the capsize risk of ships <b>Egbert Ypma, Eelco Harmsen</b>	Damaged Ro-Pax vessel time to capsize <b>Heng Ran, Ingvar Rask, Carl-Erik Janson</b>	
11:30 - 12:00	Critical wave groups vs. direct Monte-Carlo simulations for typical stability failure modes of a container ship <b>Vladimir Shigunov, Nikos Themelis, Kostas Spyrou</b>	Study on the evaluation for performance of the cross-flooding arrangements by means of the Computational Fluid Dynamics <b>Kunihide Ohashi, Yoshitaka Ogawa, Koichiro Shiraishi</b>	
12:00 - 12:30	Application of stochastic dynamical system to nonlinear ship rolling problems <b>Jeffrey Falzarano, Zhiyong Su, Arada Jamnongpipatkul</b>	Flooding prediction onboard a damaged ship <b>Pekka Ruponen, Markku Larmela, Petri Pennanen</b>	
12:30 - 14:00	Lunch		
14:00 - 15:30	Session 2.1: Probabilistic and risk - based assessment of ship stability ( <i>Panorama</i> ) <i>Chairs: Ma &amp; Jasionowski</i>	Session 2.2: Damage stability of passenger and cargo ships ( <i>Attica</i> ) <i>Chairs: Vassalos &amp; Terada</i>	Session 2.3: Decision support and operational guidance ( <i>Callirhoe</i> ) <i>Chairs: Krüger &amp; Hashimoto</i>
14:00 - 14:30	Evaluation of the probability of surf-riding in irregular waves with the time-split method <b>Vadim Belenky, Kostas Spyrou, Kenneth Weems</b>	Time dependent survivability against flooding of passenger ships in collision damages <b>Dimitris Spanos, Apostolos Papanikolaou</b>	Operational guidance with respect to pure loss of stability and parametric rolling <b>Erik Ovegård, Anders Rosén, Mikael Palmquist, Mikael Huss</b>
14:30 - 15:00	Total stability failure probability of a ship in beam wind and waves: model experiment and numerical simulation <b>Takumi Kubo, Naoya Umeda, Satoshi Izawa, Akihiko Matsuda</b>	An explicit progressive flooding simulation method <b>Hendrik Dankowski</b>	Analysis of onboard ship stability and loading instruments from developer’s perspective <b>Metin Taylan, Bulent Sener, Yasar Gul, Dirim Sener, Cemal Sahin</b>
15:00 - 15:30	Quantitative analysis of parametric roll and operational guidance <b>KangHyun Song, YongHwan Kim</b>	CFD and EFD study of damaged ship stability in calm water and regular waves <b>Hamid Sadat-Hosseini, Dong Hwan Kim, Sung Kyun Lee, Shin Hyung Rhee, Pablo Carrica, Frederick Stern, Key Pyo Rhee</b>	Putting vessel motion research into the hands of operators <b>Leigh McCue</b>
16:00 - 22:30	Visit to Cape Sounion (Poseidon Temple) followed by dinner at Aegeon Beach Hotel		



Time / Day	Tuesday September 25 <sup>th</sup>		
09:00 - 10:30	<b>Session 3.1: Stability of floating platforms</b> <i>(Panorama)</i> <i>Chairs: Falzarano &amp; Chatjigeorgiou</i>	<b>Session 3.2: Damage stability of passenger and cargo ships</b> <i>(Attica)</i> <i>Chairs: Bruhns &amp; Eliopoulou</i>	<b>Session 3.3: Ship dynamic stability in rough seas</b> <i>(Callirhoe)</i> <i>Chairs: Fossen &amp; Weems</i>
09:00 - 09:30	Investigation on parametrically excited motions of Spar platforms in waves <b>Claudio Rodriguez, Marcelo Neves</b>	A study for the harmonized probabilistic approach for damage stability taking account of the difference between Collision and Grounding <b>Koichiro Shiraishi, Yoshitaka Ogawa</b>	Study on parametric roll and its rudder stabilization based on unified seakeeping and maneuvering model <b>Liwei Yu, Ning Ma, Xiechong Gu</b>
09:30 - 10:00	A study on unstable motions of a tension leg platform in close proximity to a large FPSO <b>Luis Alberto Rivera, Marcelo Neves, Roberto Cruz, Paulo de Tarso Esperança</b>	Developing the p-factor for the case of grounding <b>Maciej Pawłowski, Dagmara Głowacka</b>	Study of system-based mathematical model using system identification methods with experimental, CFD and system-based free-running trials in following waves <b>Motoki Araki, Hamid Sadat-Hosseini, Yugo Sanada, Naoya Umeda, Frederick Stern</b>
10:00 - 10:30	The hydrodynamics of submerged prolate spheroidal bodies in infinite water depth <b>Ioannis Chatjigeorgiou, Spyros Mavrakos, Thomas Mazarakos</b>	The numerical study of hydrodynamic coefficients by RANS <b>Qiuxin Gao, Dracos Vassalos</b>	An experimental study on characteristics of rolling in head waves of a vessel with non-linear GZ-curve <b>Toru Katayama, Shugo Miyamoto, Hirotada Hashimoto, Yoshifumi Tai</b>
10:30 - 11:00	<b>Coffee break</b>		
11:00 - 12:30	<b>Session 4.1: Naval vessel stability</b> <i>(Panorama)</i> <i>Chairs: Reed &amp; Leguen</i>	<b>Session 4.2: Nonlinear dynamics of extreme behaviour</b> <i>(Attica)</i> <i>Chairs: Spyrou &amp; Palmquist</i>	<b>Session 4.3: Design safety integration</b> <i>(Callirhoe)</i> <i>Chairs: Zaraphonitis &amp; Puissa</i>
11:00 - 11:30	Operability of French naval ships over 50 years <b>Brice Beaupuy, Nicolas Stachelhausen, Jean-Yves Billard, Emmanuel Mogicato, Pierre Vonnier, Jean-François Leguen</b>	Stability of ships in parametric roll resonance under time-varying heading and speed <b>Dominik Breu, Christian Holden, Thor Fossen</b>	Coupling of progressive structural failure and loss of stability in the safe return to port framework <b>Seungmin Kwon, Qi Chen, George Mermiris, Dracos Vassalos</b>
11:30 - 12:00	Development and validation of a time domain seakeeping code for a destroyer hull-form operating in extreme sea-states <b>Frans van Walree</b>	The unstable boundary of large amplitude rolling of a ship in waves <b>Ju Fan, Renchuan Zhu, Guoping Miao, Xianglu Huang</b>	FLOODSTAND – overview of achievements <b>Risto Jalonen, Pekka Ruponen, Andrzej Jasionowski, Pierre Maurier, Markku Kajosaari, Apostolos Papanikolaou</b>
12:00 - 12:30	An investigation on stability under dead ship condition of a tumblehome hull <b>Min Gu, Jiang Lu, Tianhua Wang</b>	Conditions of surf-riding in an irregular seaway <b>Kostas Spyrou, Vadim Belenky, Nikos Themelis, Kenneth Weems</b>	Multi - objective optimization of ROPAX ships considering the SOLAS 2009 and GOALDS damage stability formulations <b>George Zaraphonitis, Sotiris Skoupas, Apostolos Papanikolaou, Mike Cardinale</b>
12:30 - 14:00	<b>Lunch</b>		

<b>14:00 - 15:30</b>	<b>Session 5.1: Naval vessel stability (Panorama)</b> <i>Chairs: Walree &amp; Judge</i>	<b>Session 5.2: Probabilistic and risk - based assessment of ship stability (Attica)</b> <i>Chairs: Athanassoulis &amp; Fan</i>	<b>Session 5.3: Ship dynamic stability in rough seas (Callirhoe)</b> <i>Chairs: Degtyarev &amp; Smith</i>
14:00 - 14:30	Mathieu instability of surfacing submarine <b>Sergei Karlinskiy, Andrei Efimov</b>	Dependence of roll and roll rate in nonlinear ship motions in following and stern quartering seas <b>Vadim Belenky, Kenneth Weems</b>	Roll stabilization by vertical thrust-producing flapping wings using active pitch control <b>Kostas Belibassakis, Gerassimos Politis</b>
14:30 - 15:00	Naval landing craft stability – simulation of extreme roll motions and shipping of water into the well deck <b>Peter Hayes, Warren Smith, Martin Renilson, Stuart Cannon</b>	A probabilistic analysis of stability regulations for river-sea ships <b>Igor Backalov</b>	Numerical simulations of manoeuvring and dynamic stability of a containership in waves <b>Sungeun Kim, Young Jae Sung</b>
15:00 - 15:30	An investigation on parametric rolling of a tumblehome hull <b>Jiang Lu, Min Gu</b>	Steady state probabilistic response of a half oscillator under colored, Gaussian or non-Gaussian excitation <b>Gerassimos Athanassoulis, Ivi Tsantili, Zacharias Kapelonis</b>	Model characteristics and validation approach for a simulation tool supporting direct stability assessment <b>William Belknap, Arthur Reed, Michael Hughes</b>
<b>15:30 - 16:00</b>	<b>Coffee break</b>		
<b>16:00 - 17:30</b>	<b>Session 6.1: Stability of high-speed craft and unconventional problems (Panorama)</b> <i>Chairs: Stern &amp; Katayama</i>	<b>Session 6.2: Modelling of environmental excitations (Attica)</b> <i>Chairs: Belibassakis &amp; Karlinskiy</i>	<b>Session 6.3: Ship dynamic stability in rough seas (Callirhoe)</b> <i>Chairs: Matusiak &amp; Mermiris</i>
16:00 - 16:30	Dynamic transverse stability for high speed craft <b>Carolyn Judge</b>	Evaluation of hydrodynamic pressures for autoregression model of irregular waves <b>Alexander Degtyarev, Ivan Gankevich</b>	Statistical extrapolation for direct stability assessment <b>Vadim Belenky, Bradley Campbell</b>
16:30 - 17:00	Bow diving of semi-swath vessel in following seas and fins stabilizer effect <b>Adi Maimun, Rahimuddin, Muhamad Pauzi Abdul Ghani, Andi Haris Muhammad</b>	Computing hydrodynamic forces and moments on a vessel without Bernoulli's equation <b>Arthur Reed</b>	Parameter estimation of a mathematical model used for ship motions in following seas based on the data assimilation <b>Daisuke Terada, Hirotada Hashimoto, Akihiko Matsuda, Naoya Umeda, Tomohiro Furukawa</b>
17:00 - 17:30	FLO/FLO Heavy lift critical stability phases <b>Paul Handler, Vincent Jarecki, Hendrik Bruhns</b>	Captive model test and numerical simulation on the maneuvering forces in waves <b>Young Jae Sung, Hyun-ho Lee, Tae-il Lee, Sungeun Kim</b>	Catastrophe theory: a modern approach for the interpretation of ship dynamics in irregular waves <b>Yury Nechaev</b>
<b>18:00 - 20:00</b>			<b>SRDC meeting</b> <i>Chair: Bulian</i>

Time / Day	<b>Wednesday September 26<sup>th</sup></b>
<b>07:00 - 20:00</b>	<b>Conference's cultural tour to Saronic Gulf islands (Poros, Hydra, Aegina)</b>

Time / Day	Thursday September 27 <sup>th</sup>		
09:00 - 10:30	<b>Industry's views of stability and safety – Keynotes (<i>Attica</i>)</b> <b>An Operator's view: J.O. de Kat (Maersk), A Shipyard's View: H. Luhmann (Meyer Werft), A Class's View: F. Cheng (LR)</b> <i>Chairs: Gratsos &amp; Huss</i>		
10:30 - 11:00	Coffee break		
11:00 - 12:30	<b>Session 7.1: Sloshing and cargo shift (<i>Panorama</i>)</b> <i>Chairs: Neves &amp; Efimov</i>	<b>Session 7.2: Ship dynamic stability in rough seas (<i>Attica</i>)</b> <i>Chairs: Belenky &amp; Gu</i>	<b>Session 7.3: Decision support and operational guidance (<i>Callirhoe</i>)</b> <i>Chairs: Pawlowski &amp; Themelis</i>
11:00 - 11:30	Numerical simulation method for coupling of tank fluid and ship roll motions <b>Hirota Hashimoto, Yuto Ito, Nagisa Kawakami, Makoto Sueyoshi</b>	Roll motion of a ship with low metacentric height in bi-chromatic beam waves <b>Gabriele Bulian, Alberto Francescutto, Marco Sinibaldi</b>	Spend less, save more (Lives) <b>Barry Deakin</b>
11:30 - 12:00	3D GPU SPH analysis of coupled sloshing and roll motion <b>Luis Pérez-Rojas, José L. Cercós-Pita</b>	Ship roll motion in irregular waves during a turning circle maneuver <b>Jerzy Matusiak, Claus Stigler</b>	Nonlinear observer design for parametric roll resonance <b>Dennis Belleter, Dominik Breu, Thor Fossen, Henk Nijmeijer</b>
12:00 - 12:30	Use of granular material dynamics simulation for the study of cargo shift of ships <b>Christos Spandonidis, Kostas Spyrou</b>	Design Requirements for Stability and Minimal Motions in a Storm <b>Vasily Khramushin</b>	Monitoring of dynamic stability via ship's motion responses <b>Hossein Enshaei, Richard Birmingham</b>
12:30 - 14:00	Lunch		
14:00 - 15:30	<b>Session 8.1: Second generation intact stability criteria (<i>Panorama</i>)</b> <i>Chairs: Szozda &amp; Bulian</i>	<b>Session 8.2: Nonlinear dynamics of extreme behaviour (<i>Attica</i>)</b> <i>Chairs: Mavrakos &amp; Janson</i>	<b>Session 8.3: Implication of stability regulation for design (<i>Callirhoe</i>)</b> <i>Chairs: Rojas &amp; Gualeni</i>
14:00 - 14:30	Stability criteria-50 years of experience and future prospects <b>Lech Kobylinski</b>	Continuation analysis of surf-riding and periodic responses of a ship in steep quartering seas <b>Ioannis Tigkas, Kostas Spyrou</b>	Influence of lower cargo deck longitudinal subdivision of SOLAS 90/2004 on Ro-Pax vessels over attained damage stability indices as 2006 amendments SOLAS per MSC 216(82) <b>Fernando Junco, Juan Marcote, Vicente Díaz, Marcos Míguez</b>
14:30 - 15:00	Approaches to ship motion simulation acceptance criteria <b>Timothy Smith</b>	Bifurcation from fluttering to autorotation of an hinged vertical flat plate submitted to a uniform current <b>Antonio Fernandes, Sina Sefat</b>	Damage stability of passenger ships - notions and truths <b>Dracos Vassalos</b>
15:00 - 15:30	On regulatory framework for direct stability assessment <b>William Peters, Vadim Belenky, Arthur Reed</b>	Effectiveness of chaotic system measures for the validation of ship dynamics simulations <b>Michele Cooper, Leigh McCue</b>	Effect of revised damage survivability formulation upon ship design <b>Romanas Puisa, Przemek Zagorski, Dracos Vassalos</b>
15:30 - 16:00	Coffee break		

<b>16:00 - 17:30</b>	<b>Session 9.1: Second generation intact stability criteria</b> <b>(Panorama)</b> <i>Chairs: deKat &amp; McCue</i>	<b>Session 9.2: Ship stability accident investigation</b> <b>(Attica)</b> <i>Chairs: Ogawa &amp; Pereira</i>	<b>Session 9.3: Fishing vessel safety</b> <b>(Callirhoe)</b> <i>Chairs: Umeda &amp; Rosén</i>
16:00 - 16:30	Test application of second generation IMO intact stability criteria on a large sample of ships <b>Clève Wandji, Philippe Corrigan</b>	Capsizing and sinking of the dredger Rozgwiazda <b>Zbigniew Szozda</b>	Experimental parametric roll resonance characterization of a stern trawler in head seas <b>Marcos Míguez-González, Vicente Díaz-Casás, Fernando López-Peña, Luis Pérez-Rojas</b>
16:30 - 17:00	Vulnerability assessment for the loss of stability in waves: some application cases for a further insight into the problem <b>Andrea Coraddu, Paola Gualeni, Diego Villa</b>	Numerical investigations of the capsizing sequence of S/S Heraklion <b>Stefan Krüger, Hendrik Dankowski, Caroline Teuscher</b>	Small fishing vessels study and modelling for the improvement of the behaviour in extreme seas <b>Antoine Pagès, Jean-Jacques Maisonneuve, Clève Wandji, Philippe Corrigan, Benoît Vincent</b>
17:00 - 17:30	Validation of a numerical simulation model for parametric rolling prediction using a PCTC <b>Hirota Hashimoto, Naoya Umeda</b>	Investigation into the sinking of the RO-RO passenger ferry S/S Heraklion <b>Apostolos Papanikolaou, Evangelos Boulougouris, Alexandros Sklavenitis</b>	The safest catch program - fishermen taking ownership of safety <b>Gina McKay, John Krgovich, Barbara Howe</b>
<b>19:30 - 21:00</b>	<b>Guided tour: Acropolis Museum highlights</b>		
<b>21:00 - 21:30</b>	<b>Welcome drink (Veranta of Acropolis Museum – 2<sup>nd</sup> Floor)</b>		
<b>21:30 - 24:00</b>	<b>Conference Gala Dinner and presentation of STAB prize</b>		



Time / Day	Friday September 28 <sup>th</sup>	
09:00 - 10:00	<b>GOALDS meeting (<i>Panorama</i>)</b> <i>Chair: Papanikolaou</i>	<b>Session 10.1: Decision support and operational guidance (<i>Attica</i>)</b> <i>Chairs: Taylan &amp; Rodriguez</i>
09:00 - 09:30	EU project presentations (by invitation)	Blind estimation of wave state from ship motions in navigation <b>Jiang Lin, Li Ji-de</b>
09:30 - 10:00		System identification for wave measurements using ship as a buoy <b>Alexander Degtyarev, Ilya Busko, Yury Nechaev</b>
10:00 - 11:00		<b>Session 11.1: Roll damping (<i>Attica</i>)</b> <i>Chairs: Maimun &amp; Shigunov</i>
10:00 - 10:30		Assessment of ship roll damping through full scale and model scale experiments and semi-empirical methods <b>Carl-Johan Söder, Anders Rosén, Sofia Werner, Mikael Huss, Jakob Kутtenkeuler</b>
10:30 - 11:00		Roll Damping of twin-screw vessels: comparison of RANSE with established methods <b>Sven Handschel, Nikolai Köllisch, Moustafa Abdel-Maksoud</b>
11:00-11:30	Coffee break	
11:30 - 13:00	<b>GOALDS meeting (<i>cont'd</i>)</b>	<b>2nd generation intact stability criteria workshop (<i>Attica</i>)</b> <i>Chairs: Peters &amp; Corrigan</i>
11:30 - 13:00	EU project public workshop	Presentations and open discussion based on IMO submissions
13:00 - 14:00	Lunch	
14:00 - 15:30	<b>GOALDS meeting (<i>cont'd</i>)</b>	<b>2nd generation intact stability criteria workshop (<i>cont'd</i>)</b>
14:00 - 15:30	EU project public workshop	Presentations and open discussion based on IMO submissions
15:30 - 16:00		<b>Closing addresses of STAB 2012 (<i>Attica</i>)</b> <i>Chair: Spyrou</i>
16:00 – 17:00	<b>GOALDS meeting (<i>cont'd</i>)</b>	
16:00 – 17:00	EU project open discussion	

## USEFUL INFORMATION

1. The Conference Secretariat (with its Registration and Help Desks) will be at the Entrance Hall of the *Callirhoe Room* (next to the swimming pool) from the noon of Sunday 23/9 and for all the days of the Conference. The same Hall will accommodate also the coffee breaks and the buffet lunches. Enquiries, special dietary requirements etc. from participants are welcomed.
2. Internet *wi - fi* will be available for the participants in the Royal Olympic Hotel, free of charge. Please ask at the Help Desk for the access code.
3. The first stream of parallel sessions is in *Room Panorama* at hotel's 6th floor. The second stream is in *Room Attica*, at the ground floor. *Attica* is also where all plenary sessions will be held. The third stream is in *Room Callirhoe*, also located at the ground floor.
4. Presenters should ensure that their presentation material is delivered to the volunteer students who will be helping with the presentations' computer loading, well in advance of the scheduled time of their talk. Standard .ppt presentations are supported. Special software requests may be possible to be accommodated. However these should be notified to the Help Desk at the time of registration at latest.
5. A special room has been reserved throughout the week for the presenters who wish to prepare or revise their material. The room can be used also from participants who wish to access their emails etc. It is identified as *Conference Room 1* located at hotel's 1<sup>st</sup> floor. If you can't find your way, please ask at the Help Desk to be guided to this room.
6. On Tuesday 25/9 from 10:00 to 14:00 the registered accompanying persons can enjoy a guided tour of the Acropolis Hill and its surroundings, followed by complimentary lunch at the Thesseion area (*the organizers reserve to right to modify this plan if the number of participants is too low*).
7. The meeting point for the Gala Dinner is Royal Olympic Hotel's lobby area. Participants should be there by 19:30. The tour in the Museum will take place in three groups which will be assembled at Hotel's lobby by the guides.
8. Participants who, in the evening of the Gala Dinner, might wish to skip the guided tour of the Acropolis Museum's highlights, are requested to be at the entrance of the Museum before 20:45.
9. Entrance to the Acropolis Museum will not be possible for anyone whose name will not be in a list provided in advance by the STAB organizers to the Museum. If uncertain, please enquire at the Help Desk.
10. Busses will depart for the excursion to Cape Sounion at 16:30 from the Royal Olympic Hotel. It takes about 70 minutes to reach the destination (Poseidon's Temple). The time of sunset for that day is 19:19. Busses will leave the Temple at 19:45. Dinner will be offered at the Aegeon Beach Hotel which is located by the sea, only a few hundred meters from the Temple. Those who wish to attend the dinner only, should reach the Aegeon Beach Hotel before 20:00.
11. Participants who are interested in the recommended walking tours described in the social programme section of this booklet, are welcomed to ask for advice or assistance at the Help Desk.
12. Busses will depart for the Conference's cultural tour from Hotel's entrance, at 07:00. Participants are therefore advised to have their breakfast very early. The ship will depart from the port of Piraeus at 08:15. Buffet lunch will be offered on board. Depending on the weather, swimming will be possible. The ship is scheduled to stay at Poros from 10:40 until 11:25, at Hydra from 12:20 until 14:10 and at Aegina from 16:15 until 18:15. Participants who are interested to visit the Temple of Athena Aphaia at Aegina should notify this to the Help Desk.
13. A STAB 2012 Conference photo shoot will take place. Time and location will be announced. Please make sure that you are in the picture!

## STAB 2012 SOCIAL PROGRAMME

The social programme is intended to offer to the delegates and to their partners a closer contact with the unique cultural heritage of the city of Athens.

With the Conference taking place in close proximity to some of world's most famous antiquities, several walking tour recommendations have been prepared at the side of the formal social programme that can be explored depending on each participant's time availability.

If you need help please do not hesitate to contact the Conference's Help Desk at Callirhoe Room's Entrance Hall.

### A. EVENTS FORMALLY INCLUDED IN THE CONFERENCE PROGRAMME

**Sunday September 23<sup>rd</sup>, 20.00 - 21.00**

COCKTAIL RECEPTION BY THE POOL – HOTEL ROYAL OLYMPIC

Enjoy a cocktail reception by the pool of Conference's venue hotel Royal Olympic, only a few metres from Olympieion and Adrian's Gate.

*(Free for full registration participants, for reduced attendance participants, for registered students, for registered retirees and for registered accompanying persons)*



**Monday September 24<sup>th</sup>, 16.00 - 22.30**

EXCURSION TO CAPE SOUNION FOLLOWED BY DINNER

Visit the famous 5<sup>th</sup> century B.C. Temple of Poseidon, seated at one of the 3 vertices of the notorious perfect triangle comprised together with "Parthenon" and "Athena Aphaia" (at Aegina island). Learn how the Aegean Sea owes its name to a mythical event associated with this spot. Experience one of the most breathtaking sunsets in the world (weather permitting). After the visit enjoy dinner with the lighted Temple on sight.

*(Free for full registration participants, for reduced attendance participants with ticket for this day, for registered students, for registered retirees and for registered accompanying persons - the event is sponsored by Lloyd's Register)*



**Tuesday September 25<sup>th</sup>, 10.00 - 14:00**

**ACROPOLIS WALKING GUIDED TOUR**

Visit Propylae, Temple of Athena Nike, Parthenon, Erechtheion with its Porch of Maidens. Continue with a pleasant short walk, passing by the Herodion and Dionysos Theatres and continuing peripherally to the Acropolis towards the lively Thessieon area where complimentary lunch will be offered.

*(Free for registered accompanying persons)*



**Wednesday September 26<sup>th</sup>, 07.00 – 20.00**

**CONFERENCE CULTURAL TOUR**

One day cruise in three beautiful islands of the Saronic Gulf: Poros, Hydra and Aegina, including lunch and a traditional Greek folk show onboard. Firstly sail for Poros, a romantic island with beautiful beaches and access to a unique lemon - tree forest. Next stop is the rocky and cosmopolitan Hydra with its renowned architectural style. At late afternoon visit Aegina (the largest of the three islands and the one nearest to Athens) with possibility to see the famous Temple of Athena Aphaia.

*(Free for full registration participants, for reduced attendance participants with ticket for this day, for registered students, for registered retirees and for registered accompanying persons)*

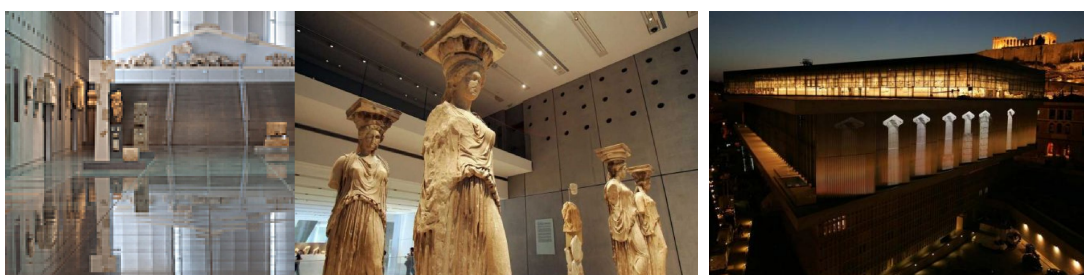


**Thursday September 27<sup>th</sup>, 19:00 – 23:30**

**CONFERENCE GALA DINNER: ACROPOLIS MUSEUM (SUBJECT TO FINAL CONFIRMATION)**

Enjoy Conference's official dinner from the 2<sup>nd</sup> Floor of the Acropolis museum, with panoramic views of the Acropolis and of the historic hills of Athens. A complimentary hourly guided tour featuring Acropolis Museum's highlights will be offered before the dinner. Please be at Museum's gate at 19:00.

*(Free for full registration participants, for registered retirees, for gala dinner ticket holders and for registered accompanying persons)*





## B. UNOFFICIAL (RECOMMENDED) TOURS AND OTHER EVENTS

The tours and other events presented below are optional. They may be planned by the delegates according to their own availability of time. Please contact the registration desk if you need help.

*(The 27<sup>th</sup> of September is World Tourism Day and access to museums and archeological sites will be free)*

### VISIT TO THE NAUTICAL MUSEUM OF GREECE

Located at the “Zeas” marina in the nearby city of Piraeus, the museum offers a glimpse into Greek maritime history. The Piraeus archeological museum is also located nearby. You may combine with a short walk around the Pasa Limani port and enjoy tea or coffee in the marina.



### DINNER AT THE PICTURESQUE PORT OF MIKROLIMANO

Enjoy a dinner by the sea and taste the delightful Mediterranean flavours. A choice of restaurants, located in the most picturesque part of Piraeus, offer magnificent views over Mikrolimano.



### WALKING TOUR TO PHILOPAPPOU HILL, PNYKA, AREIOS PAGOS AND ROMAN AGORA

Begin by visiting the nearby Hill of the Muses (now known as Philopappou Hill). Located at the south - west of the Acropolis, it offers views of Attica’s coast and beyond. Next to it you will see another famous hill, the Pnyx (Phnyx) where the Public Assembly (“Ecclesia tou Dimou”), the most important civic body of the Athenian State, was located. The area between the two hills was one of the most densely populated areas of ancient Athens. Long protecting walls ran south from here, commanding the ancient road to the port of Piraeus. Continue your walk towards the Areios Pagos, the renowned rock used as law court in ancient Athens and the place wherefrom St Paul preached Christianity to the Athenians. Continue and reach the Roman Agora (“Market”) located to the north of the Acropolis. Immediately east of the Roman Agora is the Tower of the Winds. Being already at the heart of the lively Plaka area you can relax to enjoy food or a drink. Spread in an area of about 3.5 square kilometers, Plaka is the seed wherefrom the modern city of Athens has grown.





## VISIT TO THE OLYMPIEION AND THE PANATHINAIKON STADIUM

This tour is very appropriate if you don't have much spare time (it can be completed in less than two hours). You can walk to the Olympieion site located just across the hotel Royal Olympic (go left). You will pass from Adrian's gate that was originally separating classical from Roman Athens. Olympieion is the colossal temple devoted to the Olympian Zeus whose completion took 638 years! Next to the Olympieion you will find the Athens Lawn Tennis Club established with the opportunity of the first modern Olympics Games (1896). Across the Street is the Zappeion Megaron and the National Gardens. You can walk further to reach the site of the Panathinaikon Stadium. Constructed from marble and placed exactly where an ancient stadium existed, it was the main spot of the 1896 Olympics.



## VISIT TO THE MUSEUM OF CYCLADIC ART, THE BENAKI MUSEUM AND THE KOLONAKI AREA

Walk past the building of the Greek Parliament and meet firstly the Benaki museum that hosts exhibits from the prehistoric, ancient Greek, Roman, Byzantine till the modern era. You will find also exhibits of Coptic, Chinese, pre-Columbian South American and Islamic origin. Walk further to the Museum of Cycladic Art exhibiting artifacts from the Aegean Sea and Cyprus area, with special emphasis on art from the 3rd millennium BC. You can relax at the nearby buzzing Kolonaki area, at one of the several outdoors cafés or restaurants.



## VISIT TO THE LYCABETTUS HILL

At 277 meters (908 feet) above sea level, this hill is the highest point and it is right in the centre of the city. Pine trees cover its base. At its two peaks are found the 19th century Chapel of St. George, a theatre, and a restaurant. The hill is a popular tourist destination and can be ascended on foot, by car or by a funicular railway which climbs the hill from a lower terminus at the Kolonaki area (find the railway station at Aristippou street).



## VISIT TO KERAMEIKOS AND TO THE THESSEION AREA

Walk towards the northwest of the Acropolis. Kerameikos is just by the ancient city walls and by the banks of the ancient Eridanos River. It was the potters' quarter. But it is mostly remembered as the site of the most important ancient Athenian cemetery. Numerous funerary sculptures had been erected along the Sacred Road ("Iera Odos") that begun from Kerameikos and ended at the city of Eleusis. The famous procession of the Athenians for the Eleusinian Mysteries was along this road. A visit to the nearby Thesseion area for shopping and some leisure time is recommended.



## VISIT TO THE NATIONAL ARCHAEOLOGICAL MUSEUM OF ATHENS AND THE ORIGINAL PREMISES OF THE NATIONAL TECHNICAL UNIVERSITY OF ATHENS

The National Archaeological Museum of Athens is the largest archaeological museum in Greece and one of the most important museums in the world devoted to ancient Greek art. The opportunity to see the exhibition of the Antikythera mechanism (on show until April 2013) makes a visit there an opportunity one cannot afford to miss. Next to the Museum you will find the original campus of the National Technical University of Athens with several buildings dating from the 19<sup>th</sup> century. To the north of the campus is Exarcheia square, a buzzing area for young people. Note however that the Old Campus and the Exarcheia area are sometimes converted to a field of fierce political rioting (please ask before visiting; in general it is recommended to be escorted by a local person who is knowledgeable of the area).



## THE ACADEMY OF ATHENS, THE NATIONAL LIBRARY AND THE UNIVERSITY

The Academy (at the Eleftheriou Venizelou avenue, known also as Panepistimiou street) belongs to the so - called "Neoclassical Trilogy" of Athens. An aesthetically harmonious blend of distinctive parts, it was designed by Theophile Hansen and the later part of its construction was supervised by Ernest Ziller. The National Library, by the same architect, consists of three solid parts with the Reading Room in the middle. The National ("and Capodistrian" as it is formally added to its name in memory of the first Governor of the modern Greek State) University of Athens is the third element in the Athenian Neoclassical Trilogy. Established in 1837 in the Plaka area, it has found its natural space for expansion at Panepistimiou Street and the surroundings. It was the first University not only for the newly established Greek State, but also for the Balkans and the East Mediterranean.





## VISIT TO THE CULTURAL CENTRE “HELLENIC COSMOS”

Located at Peiraios Str. No 254 (<http://www.ime.gr>) Hellenic Cosmos is a multifunctional area where can be experienced Hellenic history and culture through interactive exhibitions and virtual reality tours. “Walk” in the Ancient Agora of Athens and also in other famous spots of the ancient Greek world. A group visit can be arranged upon request. A currently running exhibition about the development of mathematical thought in ancient Greece, mostly aimed to inspire the youth, can be interesting for all ages.



## PRE- AND POST- CONFERENCE TOURS

The following excursions are available upon request. Bookings are possible via <https://www.congress.gr/wizardapp/wizard/index/24/1>. The list of tours is provisional and we welcome any other request or preference.

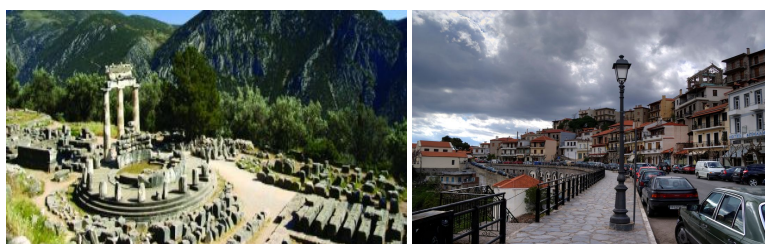
### A. THREE - DAY CLASSICAL TOUR

Reach the Peloponnese mainland by crossing the Corinth Canal. Then visit the famous (still in use) Epidavros Theatre and the nearby city of Nafplion, the first capital of modern Greece. Continue visiting Mycenae, the Homeric city that led the expedition to Troy (ca. 1200 BC). Visit further the Ancient Olympia where the original Olympic Games were taking place. Cross back to Central Greece via the Rio - Antirio bridge and continue to visit Delphi, the once - upon - a - time considered centre of the world. Return to Athens via Arachova, Livadia and Thebes.



### B. DELPHI TWO - DAY TOUR

Leave Athens at 8:30 a.m., via the National highway, passing Thebes, Livadia (short stop), Arachova. The tour continues with a detailed visit of the site, the museum and the Oracle of Apollo in Delphi, the centre of the world in antiquity. Afternoon is free. Overnight stay is in Delphi. On the second day you have the morning free to explore the village or go back to the site for a second visit. After lunch, departure to Athens. On the way back there is a short stop at the village of Arachova, a very pretty village built at 950 m height, on the slopes of the mountain Parnassos.



## USEFUL MAPS





