Outstanding Earthquake Spectra Paper Award Announced


The Earthquake Spectra Editorial Board included the following statement in their recommendation: “Rarely do we see full scale testing, to the point of collapse, of structural systems including nonstructural elements. This paper sequence describes this undertaking from the design of the experiments through to the presentation and analysis of the data. The test sequence was essentially repeated twice, once with and again without seismic isolators. The authors present the data on structural response and performance, as well as the response of the non-structural components, which are linked do the structural responses. The authors describe this as a landmark data set, and I expect they are correct about this. The impact of the work is already evident from strong citations, which are among the top for this year in the journal.”

Lead author, Elide Pantoli (pictured right) received her B.S. and M.S. degrees in Civil Engineering at the University of Bologna (Italy), and her PhD in Structural Engineering at UCSD. Her research dealt with the seismic behavior of nonstructural components, with a focus on precast concrete cladding. She is currently working at Wiss, Janney, Elstner Associates in Emeryville, California.

The award will be presented at the EERI 2018 Annual Meeting to be held Thursday, June 28, 2018, at the 11th National Conference on Earthquake Engineering in Los Angeles.

Lead author, Nasser Marafi (pictured right), is a Doctoral Candidate at the Department of Civil and Environmental Engineering at the University of Washington. He is studying the impacts and practical implications of an M9 earthquake on structures located in the Seattle basin and is advised by professors Jeffrey Berman and Marc Eberhard. Prior to attending UW, Nasser practiced structural engineering for five years and is a registered Professional Engineer in California.

The Graduate Student Paper competition was changed this year to recognize a paper published in Earthquake Spectra, with the first author being a graduate student. These papers were reviewed by the Student Activities Committee. For more information about the EERI Annual Student Paper Competition, please click here.

The award will be presented to the winning authors at the EERI 2018 Annual Meeting to be held Thursday, June 28, 2018 at the 11th National Conference on Earthquake Engineering in Los Angeles.

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EERI's 2017 Undergraduate Student Paper Award has been selected: “Non-Linear Analysis of Three-Dimensional RC Walls under Multidirectional Loading” by Carlos Garcia (M.EERI,2018).

Carlos Garcia (pictured right) is an undergraduate student at California State University Fullerton who plans to continue his education with a Masters in Structural Engineering. In learning that his paper had been chosen the winner, Carlos said, "I really enjoy the design and problem-solving aspect of engineering, and working on tough problems that keep me up at night is why I enjoy research." The award will be presented at the EERI 2018 Annual Meeting to be held Thursday, June 28, 2018 at the 11th National Conference on Earthquake Engineering in Los Angeles.

The purpose of the EERI Outstanding Student Papers Competition is to promote active involvement of students in earthquake engineering and the earthquake hazards community. Papers are judged based on their contribution to the field and their overall quality. Each paper is ranked on technical merit, clarity of expression, and relevance for the earthquake. To learn more about the student paper competitions, please click here.
3 Weeks to Go! Plan Ahead!

With only three weeks left before the conference, be sure to plan ahead to prioritize, strategize, and optimize your conference experience. EERI invites you to browse the detailed Program Schedule and Schedule-at-a-Glance for the 11th U.S. National Conference on Earthquake Engineering (11NCEE), a milestone event in earthquake engineering. If you have not already registered, please do so now.

Throughout the week of the conference (June 25-29, 2018) you will have many options to choose from, including:

- **67 Technical Topic Sessions** spanning a variety of topics and disciplines;
- **43 Special Sessions**, each with a unique interactive format and topic;
- **200+ Posters** on display;
- **Ten (10) Five-in-Five (5-in-5) Sessions** of 12-15 presentations each;
- **Nine (9) Concurrent Theme Sessions**;
- 40 teams competing in the 15th Annual Undergraduate Seismic Design Competition;
- Dynamic **plenary speakers** daily covering seismic hazard, risk, and policy;
- EERI's 70th Annual Meeting and Awards Luncheon; and
- Exciting social and networking events all week highlighted by a **special reception hosted by Computers and Structures, Inc. (CSI)**.

Please make your room reservation at the Westin Bonaventure Hotel & Suites as soon as possible. Our block of hotel rooms at the reduced
rate ends June 1, 2018. Rooms may be available after the cut-off date, but they will be offered at a higher rate. Government hotel rates are available. Please contact us at 11ncee@eeri.org for assistance booking a room at the government rate.

For general questions about the conference and sponsorship opportunities please email 11ncee@eeri.org

Regional Chapter News

EERI San Diego Regional Chapter Events: August 2018

The EERI San Diego Regional Chapter is organizing these upcoming events to be held in late August. Special discounts apply when registering for both events. Registration is now open.

Venue
San Diego State University
Hardy Memorial Tower, Room HT-140
5500 Campanile Drive
San Diego, CA 92182

A 1-Day Short Course

“Using DEEPSOIL: An equivalent linear and nonlinear seismic site response analysis software platform”
Presenter: Prof. Youssef Hashash (M.EERI, 1999), University of Illinois at Urbana-Champaign
Thursday, August 23, 2018, 8:00am – 5:00pm

This short course will introduce the latest release of DEEPSOIL (V7) for seismic site response analysis (SRA). The course will provide attendees with a background on SRA and the development of the DEEPSOIL platform. It will cover the various modules available including motion processing, equivalent linear analysis, and nonlinear analysis with and without pore water pressure generation. The course will also include a number of hands-on exercises to gain familiarity with the development of model input and evaluation of analysis results.

Kenji Ishihara Colloquium Series on Earthquake Geotechnical Engineering

“Seismic Settlements”
Moderators: Prof. Julio R. Valdes and Dr. Jorge Meneses (M.EERI, 2006)
Friday, August 24, 2018, 8:00am – 5:00pm
This colloquium series will focus on seismic settlements – the topics are oriented towards geotechnical engineers, structural engineers, engineering geologists, architects, civil engineers, researchers, and students. Speakers set to present at this colloquium include Prof. Jonathan Bray (M.EERI, 1990) (UC Berkeley), Prof. Kohji Tokimatsu (M.EERI, 1994) (Tokyo Soil Research Co.), Prof. Youssef Hashash (M.EERI, 1999) (UIUC), Prof. Susumu Yasuda (M.EERI, 1995) (Tokyo Denki University), Craig Comartin (M.EERI, 1987) (CDComartin, Inc.), Stephen Harris (M.EERI, 1986) (SGH), among other professionals and professors from the US and Japan.

REGISTER HERE

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ANNOUNCEMENTS

- Natural Hazards Reconnaissance Facility Intensive User Training Workshop: July 24 - 27

The RAPID facility supports and provides tools for the collection of perishable field data relevant to natural hazard events. On July 24-27, 2018 the RAPID will host a hands-on, intensive workshop at the University of Washington, Seattle, providing attendees with the opportunity to develop expertise in: using the RAPID equipment to collect data, processing the data, and integrating the data and associated metadata through the use of the RAPID software (the RApp) and DesignSafe.

A more detailed description of the training is provided on the application website.

To register for the workshop please [click here](#).

To learn more about the RAPID facility please [click here](#).

Questions? Please email Jake Dafni at uwrapid@uw.edu

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- Call for Papers: 12th Canadian Conference on Earthquake Engineering

The Canadian Association for Earthquake Engineering (CAEE) is proud to announce the 12th Canadian Conference on Earthquake Engineering that will be held in Quebec City, June 17-20, 2019. This is the most important international conference on seismic engineering to be held in Canada. It brings together researchers, structural engineers, geotechnical engineers, architects, seismologists and regulatory bodies from all over the world every four years. The conference theme is "Improving
Seismic Infrastructure Performance and Community Resilience. Topics include Seismic hazard, Seismology, Codes and standards, Seismic geotechnical issues, Seismic structural behaviour and design (bridges, buildings, dams, energy transportation lines, ...), Seismic rehabilitation, Seismic mitigation systems, Societal impacts, Risk management, Dam safety, Machine learning applications for seismic reliability of structures and Structural health monitoring.

You are invited to submit abstracts through the submission system of the conference from now until September 15, 2018. Note that English will be the only official language of the conference. For more information, please visit the website.

OPPORTUNITIES

Job Opening: Researcher in Geotechnical Engineering - Ifremer

The French Research Institute for Exploitation of the Sea, Ifremer, through its research work and expert advice, contributes to knowledge of the oceans and their resources, to monitoring of marine and coastal environments and to the sustainable development of marine activities, is seeking a Researcher in Geotechnical Engineering for a permanent position, full-time contract. The job is located at the Département Ressources physiques et Ecosystèmes du fond de Mer (REM) Unité de Recherche Géosciences Marines (GM) Laboratoire Aléas géologiques et Dynamique sédimentaire (LAD), Duty station: Centre Bretagne, Brest. Starting date: January 2019.

For more information including qualifications and how to apply, please click here.

PUBLICATIONS

Earthquake Spectra: Preprint Manuscripts

Fourteen (14) preprint manuscripts have been posted to the Earthquake Spectra website prior to formal publication. The papers to be published are:
- Investigation of Global Equivalent Damping and Statistical Relationship of Displacement between Nonlinear Static and Dynamic Analysis of RC Frame Structures by Lulu Yan, Jinxin Gong and Qin Zhang

- The Seismic Response of Rocking Blocks by Kari Klaboe (M.EERI,2010), Santiago Pujol (M.EERI,2009) and Lucas Laughery (M.EERI,2013)

- Seismic Demands in Column Base Connections of Steel Moment Frames by Pablo Torres Rodas, Farzin Zareian (M.EERI,2005) and Amit Kanvinde

- A Phased Reconnaissance Approach to Documenting Landslides Following the 2016 Central Italy Earthquakes by Kevin W. Franke (M.EERI,2008), Bret N. Lingwall, Paolo Zimmaro (M.EERI,2015), Robert E. Kayen (M.EERI,2004), Paolo Tommasi, Filiberto Chiabrando and Antonio Santo


- Strong Ground Motion Characteristics from 2016 Central Italy Earthquake Sequence by Paolo Zimmaro (M.EERI,2015), Giuseppe Scasserra, Jonathan P. Stewart (M.EERI,1994), Tadahiro Kishida (M.EERI,2005), Giuseppe Tropeano, Massimina Castiglia and Panagiotis Pelekas

- Generalized Response Spectrum Analysis for Structures with Dampers by Yuki Terazawa and Toru Takeuchi


- Fragility Curves for Wide-Flange Steel Columns and Implications on Building-Specific Earthquake-Induced Loss Assessment by Ahmed Elkady, Subash Ghimire and Dimitrios G. Lignos (M.EERI,2009)


- Ground motion prediction model for the peak inelastic displacement of SDOF bilinear systems by Pablo Heresi, Héctor Dávalos (M.EERI,2013) and Eduardo Miranda (M.EERI,1987)

- Nonlinear Beam-Based Modeling of RC Columns Including the Effect of Reinforcing Bar Buckling and Rupture by Sadik Can Girgin, Mohammadreza Moharrami and Ioannis Koutromanos (M.EERI,2014)

- Boundary Elements of Special Reinforced Concrete Walls Tested Under Different Loading Paths by Ana G. Haro (M.EERI,2014), Mervyn Kowalsky (M.EERI,1994), Y.H. Chai and Gregory W. Lucier


To read all current preprint manuscripts posted, visit Earthquake Spectra preprints.
If you have questions about Spectra, contact Managing Editor Liz Stalnaker at liz@eeri.org
East vs West Coast Earthquakes: Fewer Quakes but Bigger Stakes in the East (USGS News) Why was an earthquake in Virginia felt at more than twice the distance than a similar-sized earthquake in California? The answer is one that many people may not realize. Earthquakes east of the Rocky Mountains can cause noticeable ground shaking at much farther distances than comparably-sized earthquakes in the West. Read more

Papua New Guinea: Highlands Earthquake Situation Report No. 10 (ReliefWeb) The latest figures available from the Displacement Tracking Matrix (DTM) implemented as part of the Shelter/CCCM Cluster response, indicate (as of May 28, 2018) that 11,761 households (approximately 58,300 people) remain displaced, of which 1,672 households are staying in eleven care centres while 10,089 households are staying with host communities. Read more

London Earthquake Risk: Scientists Discover Two Fault Lines Under Capital (The Telegraph) Researchers from Imperial College pinpointed the two faults moving between 1mm and 2mm a year, one running directly under central London and another under Canary Wharf. They say the chance of an earthquake is “enough to be scary but not fundamentally a problem.” Read more

Duterte Creates NCR Quake Resiliency Office (Manila Bulletin) The President of the Philippines has created an office that would ensure the resiliency and preparedness of the greater Metro Manila area (GMMA) in case a major earthquake strike the region. Read more

Global Earthquake Forecast Passes Test (Temblor) A newly-accepted study by the journal, Seismological Research Letters, analyzes the Global Earthquake Activity Rate (GEAR1) model, which is shown in Temblor. The test they conducted provides support for the model’s validity for worldwide annual earthquake forecasting. Read more

No Casualties Reported After 5.7-Magnitude Earthquake Hits China’s Jilin (Xinhuanet) HANGCHUN, May 28 a 5.7-magnitude earthquake hit Ningjiang District, Songyuan City of northeast China’s Jilin Province at 1:50 a.m. Monday Beijing time, according to local authorities. An emergency response mechanism has been launched. Read more

Machine Learning Could Help Scientists Predict and Control Seismic Activities (Engineering.com) Researchers at Columbia University developed a new technique that allows them to apply machine learning in studying vast earthquake data sets. Read more
Follow these steps to add EERI Calendar to your own Google calendar.

1. Open Google Calendar
2. On the left, above "My Calendars," click Add + and then From URL.
3. Enter the EERI calendar's address in the field provided. EERI Calendar ics link
   https://calendar.google.com/calendar/ical/eeri.org_s9151tit0ab26dnf2epn25d7rg%40group.calendar.google.com/public/basic.ics
4. Click Add Calendar. The calendar will appear on the left side under "Other calendars."

Monday, April 27, 2020 - April 30
**SSA 2020 Annual Meeting**
SSA 2020 Annual Meeting
27-30 April 2020 — Albuquerque, New Mexico
The 2020 Annual Meeting will be held in Albuquerque, New Mexico.
Check back later for more information.

Friday, May 15, 2020 5:00 PM - May 16 2:00 AM
**2020 Los Angeles Tall Buildings Conference**
The 2020 Los Angeles Tall Buildings StructuralDesign Council conference will cover a variety of topics related to recent advances in structural design of tall and special buildings. Learn more: www.latallbuildings.org

Monday, September 14, 2020 - September 18
**17th WCEE**
The 17th WCEE will be hosted in Sendai, Japan, from September 14th to 18th 2020. Check http://www.iaee.or.jp/ for more information.

Sunday, February 07, 2021 - February 10
**ASCE/UCLA San Fernando Earthquake Conference**