



Engineering Mechanics Institute Conference 2018

May 29 – June 1, 2018 at M.I.T., Cambridge MA

Call For Papers

Mini-Symposium: **MS95: Recent Advances in Real-Time Hybrid Simulation**

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About Conference: The Engineering Mechanics Institute (EMI) of ASCE organizes an annual conference offering a premier opportunity to network with leaders in the field, expand your horizons, and establish professional relationships to advance your research and your career. The 2018 EMI conference will be held at M.I.T. in Cambridge, MA in May 29 – June 1, 2018.

<https://umi.mit.edu/EMI2018>

About Mini-Symposium

Real-time hybrid simulation (RTHS) is a novel, powerful and cost-effective experimental technique for examining the global behavior of complex, large-scale structural systems under realistic dynamic loading conditions. This technique is developed by coupling both physical and simulated components, and applying advanced algorithms to interface these two components to provide real-time loading rate as the experiment progresses. Recent advances in RTHS are offering better understanding to the fundamental issues in RTHS, and enabling more efficient and cost-effective solutions to the investigation of global structural system behavior under realistic conditions. The goal of this mini symposium is to provide a forum for RTHS researchers to exchange information, disseminate recent findings, and identify future key focus areas in RTHS. This symposium invites papers related to the following aspects of RTHS: numerical integration, actuator control, noise treatment, assessment criteria, stability analysis, innovative hybrid simulation framework, recent RTHS implementations and applications. Topics of interest include, but not limited to:

- development of enabling algorithms—servo-hydraulic compensation, numerical integration, etc.
- performance assessment of real-time hybrid simulation
- advances of real-time hybrid simulation in hazard engineering (e.g., earthquake, wind, tsunami)
- real-time hybrid simulation in other engineering disciplines

We invite you to contribute your relevant research work to this Mini-Symposium. [You may submit your abstract via the link and select this mini-symposium \(MS95\): https://www.openconf.org/emi2018/openconf.php](https://www.openconf.org/emi2018/openconf.php). Look forward to meeting you at EMI 2018.

Important Deadlines: Abstract Submission: 31 January 2018

Early Bird Registration: 16 March 2018