

Presentations and Talks

Copyright to material below is held by [Boris Jeremić](#) through General Public Licence. Please treat this material in a way consistent with the "fair use" provisions of appropriate copyright law.

Recent presentations are available in PDF below

145. Boris Jeremić. Modeling and Simulation of Static and Dynamic Behavior of Soil Structure Systems Short Course on Computer Methods and Constitutive Modeling in Geomechanics, with Prof. C.S. Desai and Prof. K. El-Hoseiny, Second GeoMEast Conference, Cairo, Egypt 24-28 November, 2018.[\(PDF\)](#)
144. Boris Jeremić. Beneficial and Detrimental Effects of Earthquake Soil Structure Interaction Second GeoMEast Conference, Cairo, Egypt 24-28 November, 2018.[\(PDF\)](#)
143. Boris Jeremić. Modeling and Simulation of Earthquake Soil Structure Interaction for Nuclear Installations DOE/NRC Natural Phenomena Hazard Meeting, North Bethesda, MD, U.S.A. 23-24 October, 2018.[\(PDF\)](#)
142. Boris Jeremić. Modeling and Simulation of Static and Dynamic Behavior of Soil Structure Systems. United States Bureau of Reclamation, Denver, CO, U.S.A. 22 August, 2018.[\(PDF\)](#)
141. Boris Jeremić. High Fidelity Modeling and Simulation of Earthquake Soil Structure Interaction Effects for Infrastructure Objects. World Congress on Computational Mechanics, New York, NY, U.S.A. 22-27 July, 2018.[\(PDF\)](#)
140. Boris Jeremić. 3D Nonlinear Earthquake Soil Structure Interactions for Nuclear Installations. 11th National Conference on Earthquake Engineering, Los Angeles, CA, U.S.A. 25-29 June, 2018.[\(PDF\)](#)
139. Boris Jeremić. MS-ESSI for Professional Practice. Eidgenössischen Nuklearsicherheitsinspektorats (ENSI), Inspection fédérale de la sécurité nucléaire (IFSN), Ispettorato federale della sicurezza nucleare (IFSN), Technical Seminar Series, Brugg, Switzerland, 18 May, 2018.[\(PDF\)](#)
138. Boris Jeremić. Modeling and Simulation of Earthquakes, Soils, Structures and their Interaction. Eidgenössische Technische Hochschule (ETH) Zürich, Seminar Series. Zurich, Switzerland, 17 May, 2018.[\(PDF\)](#)
137. Boris Jeremić. Modeling and Simulation of Earthquakes, Soils, Structures and their Interaction. Workshop on Best Practices in Physics-Based Fault Rupture Models for Seismic Hazard Assessment of Nuclear Installations (Best-PSHANI), Château de Cadarache, France, 16 May, 2018.[\(PDF\)](#)
136. Boris Jeremić. Modeling and Simulation of Earthquakes, and Soils, and Structures and their Interaction using Real ESSI Simulator System. ARUP, San Francisco, California, USA, 15 February, 2018.[\(PDF\)](#)
135. Boris Jeremić. Hierarchical, High Fidelity Modeling and Simulation of Static and Dynamic Behaviour of Soil Structure Systems. Ørsted Energy, Copenhagen, Denmark, 15 January, 2018.[\(PDF\)](#)
134. Boris Jeremić. Realistic Modeling and Simulation of Earthquake Soil Structure Interaction. United Nations, International Atomic Energy Agency, Department of Nuclear Safety and Security, Division of Nuclear Installation, External Events Safety Section, Vienna, Austria, 12 January, 2018.[\(PDF\)](#)
133. Boris Jeremić. Real ESSI Simulator, Inelastic Modeling and Simulations for Soils, Contacts and Structures. Real ESSI Short Course, San Francisco, CA, USA, 12-14 December 2017. (Available to participants only)
132. Boris Jeremić. Real ESSI Simulator, Seismic Ground Motions. Real ESSI Short Course, San Francisco, CA, USA, 12-14 December 2017. (Available to participants only)

131. Boris Jeremić. Real ESSI Simulator, Intro, Setup and Staged Nonlinear Modeling. Real ESSI Short Course, San Francisco, CA, USA, 12-14 December 2017. (Available to participants only)
130. Boris Jeremić. Soil Structure Interaction – Case Studies, Models and Results. UN-IAEA Mission to SNSA, Ljubljana, Slovenia, 14-16 November, 2017. (Available from the UN-IAEA)
129. Boris Jeremić. Soil Structure Interaction – Frequency and Time Domain Analysis. UN-IAEA Mission to SNSA, Ljubljana, Slovenia, 14-16 November, 2017. (Available from the UN-IAEA)
128. Boris Jeremić. Soil Structure Interaction – Site Response Analysis. UN-IAEA Mission to SNSA, Ljubljana, Slovenia, 14-16 November, 2017. (Available from the UN-IAEA)
127. Boris Jeremić. 3D vs 1D vs 3x1D Ground Motions and the Earthquake Soil Structure Interaction. Structural Mechanics in Reactor Technology (SMiRT) 24 Conference, Busan, Republic of Korea, 20-25 August, 2017.[\(PDF\)](#)
126. Boris Jeremić. Nonlinear effects in Earthquake Soil Structure Interaction of Nuclear Power Plants. Structural Mechanics in Reactor Technology (SMiRT) 24 Conference, Busan, Republic of Korea, 20-25 August, 2017.[\(PDF\)](#)
125. Boris Jeremić. Nonlinear Earthquake Soil Structure Interaction Analysis for Small Modular Reactors. Structural Mechanics in Reactor Technology (SMiRT) 24 Conference, Busan, Republic of Korea, 20-25 August, 2017.[\(PDF\)](#)
124. Boris Jeremić. Verification for the Real ESSI Simulator. Structural Mechanics in Reactor Technology (SMiRT) 24 Conference, Busan, Republic of Korea, 20-25 August, 2017.[\(PDF\)](#)
123. Boris Jeremić. Stochastic Elastic-Plastic Finite Element Method: Recent Advances and Developments. 4th South-East European Conference on Computational Mechanics, ECCOMAS Special Interest Conference, 3-5 July 2017.[\(PDF\)](#)
122. Boris Jeremić. Моделовање еласто-пластичних система применом теорије вероватноћа. (Modeling of elastic-plastic systems using theory of probability). Институт за водопривреду ”Јарослав Черни” Београд, Србија, Institute for Water Resources, ”Jaroslav Černi” Belgrade, Serbia, 29th June 2017.[\(PDF\)](#)
121. Boris Jeremić. Site Specific Dynamics of Structures: From Seismic Source to the Safety of Occupants and Content (Plenary Lecture). 6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (CompDyn2015), Rhodes Island, Greece, 14-17 June 2017.[\(PDF\)](#)
120. Boris Jeremić. Advancement in Earthquake Soil Structure Interaction (ESSI) Modeling and Simulation. 2017 Pacific Rim Forum, Earthquake Resilience of Nuclear Facilities, University of California, Berkeley, California, 24th January 2017.[\(PDF\)](#)
119. Boris Jeremić. Динамика тла и конструкције при земљотресима, непоуздани модели, непоуздани параметри и теорија вероватноћа, (Dynamics of Soils and Structures During Earthquakes, Uncertain Models, Uncertain Parameters and Theory of Probability). Институт за Испитивање Материјала Србије и Грађевински Факултет Универзитета у Београду, Београд, Србија, 16-ти Децембар, 2016, Institute for Testing of Materials, and Civil Engineering Faculty of the University of Belgrade, Belgrade, Serbia, 16th December 2016.[\(PDF\)](#)

118. Boris Jeremić. On Modeling Uncertainty in Earthquake Soil Structure Interaction Analysis. Seventh Kwang-Hua Forum on Innovations and Implementations in Earthquake Engineering Research Area, State Key Laboratory of Disaster Prevention in Civil Engineering, International Laboratory for Earthquake Engineering (ILEE), Tongji University, Shanghai, China, 9 December, 2016.[\(PDF\)](#)
117. Boris Jeremić. The Real ESSI Simulator. US-DOE, Office of Nuclear Energy, Washington DC, 8 June, 2016. (not for public distribution)
116. Boris Jeremić. Real ESSI Simulator, High Performance Computing Issues. US-DOE, Office of Science, Washington DC, 12 May, 2016. (not for public distribution)
115. Boris Jeremić. Development of Analytical Tools for Soil-Structure Interaction Analysis. Canadian Nuclear Safety Commission (CNSC), Ottawa, Ontario, Canada, 04 March, 2016. (not for public distribution)
114. Boris Jeremić. Inelastic Earthquake Soil Structure Interaction Modeling and Simulations at UCD and LBNL. IAEA, UN, Vienna. Austria, 24 February, 2016. (not for public distribution)
113. Boris Jeremić. Modelling and Simulation Uncertainty. Computational Mechanics Working Group Seminar Series, University of California, Davis, California, 16 February, 2016.[\(PDF\)](#)
112. Boris Jeremić. Uncertainties in Modelling and Simulation of Earthquake Soils Structures Interaction. Earthquake Engineering Institute, University of Tokyo, Tokyo, Japan, 25 January, 2016.[\(PDF\)](#)
111. Boris Jeremić. Modelling and Simulation of Static and Dynamic Soils Structures Interaction Under Uncertainty. Technical Seminar Series, Géodynamique et Structure, Bagneux, France, 23 November 2015.[\(PDF\)](#)
110. Boris Jeremić. Wavelet Based Synthetic Earthquake Sources for Path and Soil Structure Interaction Modeling: Stress Testing of Nuclear Power Plant. Workshop on Best Practices in Physics-Based Fault Rupture Models for Seismic Hazard Assessment of Nuclear Installations (BestPSHANI), IAEA Headquarters, Vienna, Austria, 18-20 November 2015.[\(PDF\)](#)
109. Boris Jeremić. Modelling and Simulation of Earthquake Soils Structures Interaction Under Uncertainty. International Scientific Collaboration Meeting, Southwest Jiaotong University, Chengdu, China, 12-13 October 2015.[\(PDF\)](#)
108. Boris Jeremić. Non-linear Soil-Structure Interaction: Benefits and Issues (Special Session on Nonlinear Soil Structure Interaction Behavior of NPPs). Structural Mechanics in Reactor Technology (SMiRT) 23 Conference, Manchester, UK, 10-14 August, 2015.[\(PDF\)](#)
107. Boris Jeremić. Use of Nonlinear, Time Domain Analysis for Design. Structural Mechanics in Reactor Technology (SMiRT) 23 Conference, Manchester, UK, 10-14 August, 2015.[\(PDF\)](#)
106. Boris Jeremić. Nonlinear Simulations for Soil-Structure Interaction and Performance-Based Design. 2015 UC Pacific Rim Forum, Earthquake Resilience of Nuclear Facilities, University of California, Berkeley, California, 8-9 June 2015.[\(PDF\)](#)
105. Boris Jeremić. Dynamics of Soils and Structures under Uncertainty. 5th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering (CompDyn2015), Crete Island, Greece, 25-27 May 2015.[\(PDF\)](#)
104. Boris Jeremić. Earthquake Soil Structure Interaction Modeling and Simulation. Southern California Earthquake Center (SCEC), Workshop on Integration of 3D Nonlinear Site Effects in Physics-Based Ground Motion Simulations, SCEC Headquarters, University of Southern California, Los Angeles, CA, U.S.A. 5th May 2015.[\(PDF\)](#)

103. Boris Jeremić. Real ESSI Modeling and Simulation: Reduction of Modeling Uncertainty. Civil Nuclear Energy Research and Development Working Group, USA-Japan (CNerdWG), meeting, Argonne National Laboratory, Argonne Il. U.S.A. 27th-29th January, 2015.[\(PDF\)](#)
102. Boris Jeremić. Real Earthquake Soil Structure Interaction (Real ESSI) Modeling and Simulation. PRENOLIN workshop, Nice France, 15th-17th December, 2014.[\(PDF\)](#)
101. Boris Jeremić. Nonlinear Time Domain Modeling and Simulation of Surface and Embedded NPPs. Department of Energy, Natural Phenomena Hazard Meeting, Germantown, MD, USA, October 21st-22nd 2014.[\(PDF\)](#)
100. Boris Jeremić. High Fidelity Seismic Modeling and Simulation of Nuclear Facilities. Department of Energy, presentation to the Secretary of Energy, Washington D.C., USA, September 15th, 2014.[\(PDF\)](#)
99. Boris Jeremić. Civil and Structural Engineering Gaps in Small Modular Reactor Designs. ASME SMR 2014 Symposium, Washington, D.C. USA, April 15th-17th, 2014.[\(PDF\)](#)
98. Boris Jeremić. PRENOLIN Meeting Presentation. PRENOLIN 3rd Workshop, Nice, France, April 7th-8th, 2014.[\(PDF\)](#)
97. Boris Jeremić. INL SSI Steering Committee Meeting. Idaho Falls, Idaho, USA, January 15th-16th, 2014.[\(PDF\)](#)
96. Boris Jeremić. Earthquake Soil Structure Interaction (ESSI) Modeling and Simulation. Caltrans Seminar Series, Sacramento, California, USA, December 4th 2013. 2013.[\(PDF\)](#)
95. Boris Jeremić. PRENOLIN Meeting Presentation. PRENOLIN 2nd Workshop, Nice, France, November 4th-5th 2013. 2013.[\(PDF\)](#)
94. Boris Jeremić. ESSI Simulator Program, Current Status. Structural Mechanics in Reactor Technology (SMiRT) 22 Conference, San Francisco, California, U.S.A. August 18th - 23rd, 2013.[\(PDF\)](#)
93. Boris Jeremić. Earthquake Soil Structure Interaction for Nuclear Power Plants, Modeling and Computational Issues. CompDyn2013, 4th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Island of Kos, Greece, June 12th – 14th, 2013.[\(PDF\)](#)
92. Boris Jeremić. On Earthquake Soil Structure Interaction Modeling and Simulation. National Technical University of Athens Seminar Series, Athens, Greece, June 12th, 2013.[\(PDF\)](#)
91. Boris Jeremić. Select Aspects of Earthquake Soil Structure Interaction Modeling and Simulation. UCD GGSS Seminar Series, Davis, California, May 23rd. 2013.[\(PDF\)](#)
90. Boris Jeremić. Time Domain Nonlinear Earthquake Soil/Rock Structure Interaction Modeling and Simulation. ASCE-4 Meeting, Sand Diego, California, April 5th. 2013.[\(PDF\)](#)
89. Boris Jeremić. Challenges and Tools for Non-Linear SSI Analysis. Workshop on Analytical Methods for Seismic SSI Analysis PEER, UC Berkeley, Berkeley, California, January 9-10, 2013.[\(PDF\)](#)
88. Boris Jeremić. Nonlinear Soil Modeling for Seismic NPP Applications. Lawrence Berkeley National Laboratory, Nuclear Waste Program Seminar Series, Friday, December 14, 2012.[\(PDF\)](#)
87. Boris Jeremić. Aspects of Deterministic and Probabilistic Modeling and Simulation in Earthquake Engineering. Lawrence Berkeley National Laboratory, Earth Sciences Division Seminar Series, Friday, December 14, 2012.[\(PDF\)](#)

86. Boris Jeremić. The NRC ESSI Simulator. International Experts Meeting on Protection against Extreme Earthquakes and Tsunamis in the Light of the Accident at the Fukushima Daiichi Nuclear Power Plant, IAEA, Vienna, Austria, September 4-7, 2012.[\(PDF\)](#)
85. Boris Jeremić. Modeling and Simulation of Earthquake Soil Structure Interaction for Risk Informed Decision Making in Nuclear Power Industry. Idaho National Laboratory, Idaho Falls, Idaho, July 16-17, 2012.[\(PDF\)](#)
84. Boris Jeremić, Nima Tafazzoli, Nebojša Orbović and Andrei Blahoianu. Amplification of Seismic Input due to 1D, 2D and 3D effects, and their Importance for NPP Structures. 21st Structural Mechanics in Reactor Technology (SMiRT) Conference, New Delhi, India, November 6-11, 2011.[\(PDF\)](#)
83. Boris Jeremić, Nima Tafazzoli, Nebojša Orbović and Andrei Blahoianu. 3D Analysis of the Influence of Varying Rock/Soil Profiles on Seismic NPP Response. 21st Structural Mechanics in Reactor Technology (SMiRT) Conference, New Delhi, India, November 6-11, 2011.[\(PDF\)](#)
82. Boris Jeremić, Annie Kammerer, Nima Tafazzoli and Babak Kamrani. The Nonlinear Time-Domain Modeling of Earthquake Soil Structure Interaction for Nuclear Power Plants: Nonlinear Contact Between Foundation and Rock. 21st Structural Mechanics in Reactor Technology (SMiRT) Conference, New Delhi, India, November 6-11, 2011.[\(PDF\)](#)
81. Boris Jeremić, Annie Kammerer, Nima Tafazzoli and Babak Kamrani. The NRC ESSI Simulator. 21st Structural Mechanics in Reactor Technology (SMiRT) Conference, New Delhi, India, November 6-11, 2011.[\(PDF\)](#)
80. Boris Jeremić, Kallol Sett. Stochastic Elastic-Plastic Finite Element Method for Performance Risk Simulations. 11th International Conference on Applications of Statistics and Probability in Civil Engineering. Zürich, Switzerland, August 1-4, 2011.[\(PDF\)](#)
79. Boris Jeremić, Panagiota Tasiopoulou, Mahdi Taiebat, Nima Tafazzoli, Mario Martinelli. Verification Procedures for Simulation of Fully Coupled Behavior of Porous Media. 11th US National Congress on Computational Mechanics, (USNCCM11), Minneapolis, Minnesota, U.S.A., July 25-28, 2011.[\(PDF\)](#)
78. Boris Jeremić. High Performance, High Fidelity Modeling and Simulation of Earthquake-Soil-Structure Interaction for Nuclear Power Industry Quake Summit 2011, NEES & MCEER Annual Meeting, Buffalo, NY, June 9-11, 2011.[\(PDF\)](#)
77. Boris Jeremić. Assessment of Seismic Input and Soil Structure Interaction for Deeply Embedded, Large Foundations. Canadian Nuclear Safety Commission (CNSC), Ottawa, Ontario, Canada, March 7th, 2011.
(not for public distribution)
76. Boris Jeremić. Stochastic Elastic-Plastic Finite Element Method. Intel Corporation, Structural TCT Lecture Series (webinar), California, Arizona, Oregon (U.S.A); Malaysia; 18 October, 2010.[\(PDF\)](#)
75. Boris Jeremić, Nima Tafazzoli, Babak Kamrani, You-Chao Chao, Chang-Gyun Jeong, Panagiota Tasiopoulou, Kallol Sett, Annie Kammerer, Nebojša Orbović, and Andrei Blahoianu. On Seismic Soil Structure Interaction Simulations for Nuclear Power Plants. OECD – NEA – IAGE – ISSC Workshop on Soil Structure Interaction Knowledge and Effect on the Seismic Assessment of NPPs Structures and Components, Ottawa, Canada, 6-8 October 2010.[\(PDF\)](#)
74. Boris Jeremić. Factors of Safety for 3D vs 2D for Curved Section of the Wolf Creek Dam. Wolf Creek Dam Foundation Remediation Project. Wolf Creek Dam site, Kentucky, 19 – 21 April 2010, (not for public distribution)

73. Boris Jeremić. Simulations in Geomechanics: The Issue of Uncertainty. University of Tennessee, Department of Civil and Environmental Engineering Seminar Series, 26 March 2010.[\(PDF\)](#)
72. Boris Jeremić. Real-Time Monitoring for Soil-Structure Systems Under Uncertainty. Real Time Monitoring Meeting, Dubai, United Arab Emirates, 29 January - 2 February 2010. (not for public distribution)
71. Boris Jeremić. Continuum Modeling of Intact Rock. Workshop on Ground Shock in Faulted Media, McLean, Virginia, 12-15 January 2010. (not for public distribution)
70. Boris Jeremić. High Fidelity Modeling and Simulation of SFS Interaction: Energy Dissipation by Design. International Workshop on Soil-Foundation-Structure Interaction, University of Auckland, New Zealand, 26-27 November 2009.[\(PDF\)](#)
69. Boris Jeremić, Kallol Sett, Lev Kavvas and Suzana Koprivica. Решење еласто-пластичног проблема у простору вероватноћа и примена на практичне проблеме (Solution for the probabilistic elastic-plastic problem and its application to practical problems) UNION University, Belgrade, Serbia, 29th June, 2009.[\(PDF\)](#)
68. Boris Jeremić, and Kallol Sett. Stochastic Elastic-Plastic Finite Element Method, SEECM2009, 2nd South East European Conference on Computational Mechanics, Island of Rhodes, Greece, 22-24 June, 2009.[\(PDF\)](#)
67. Boris Jeremić, Nima Tafazzoli, Mahdi Taiebat and Guanzhou Jie. Directing Energy Dissipation in Earthquake-Soil-Structure Systems, CompDyn2009, 2nd International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, Island of Rhodes, Greece, 22-24 June, 2009.[\(PDF\)](#)
66. Boris Jeremić. The Case for Probabilistic Elasto-Plasticity, GheoMat: Deformation and Failure of Geomaterials, a Multidisciplinary Scientific Workshop, Masseria Salamina, Brindisi, Italy, 14-19 June 2009.[\(PDF\)](#)
65. Boris Jeremić. Verification and Validation in Computational Geomechanics, GheoMat: Deformation and Failure of Geomaterials, a Multidisciplinary Scientific Workshop, Masseria Salamina, Brindisi, Italy, 14-19 June 2009.[\(PDF\)](#)
64. Boris Jeremić. High Fidelity, Large Scale Modeling and Simulation, GheoMat: Deformation and Failure of Geomaterials, a Multidisciplinary Scientific Workshop, Masseria Salamina, Brindisi, Italy, 14-19 June 2009.[\(PDF\)](#)
63. Boris Jeremić. Fully Coupled, Two Phase Behavior of Geomaterials, GheoMat: Deformation and Failure of Geomaterials, a Multidisciplinary Scientific Workshop, Masseria Salamina, Brindisi, Italy, 14-19 June 2009.[\(PDF\)](#)
62. Boris Jeremić. Elastic-Plastic Behavior of Geomaterials: Modeling and Simulation Issues, GheoMat: Deformation and Failure of Geomaterials, a Multidisciplinary Scientific Workshop, Masseria Salamina, Brindisi, Italy, 14-19 June 2009.[\(PDF\)](#)
61. Boris Jeremić. Earthquake-Soil-Structure Systems, 2008 Association of Pacific Rim Universities Symposium: Multi-Hazard Around the Pacific Rim, Davis, California, August 21st-22nd, 2008.[\(PDF\)](#)
60. Boris Jeremić. On Probabilistic Yielding of (Geo-)Materials, Eight World Congress on Computational Mechanics, Venice, Italy, June 30th – July 4th, 2008.[\(PDF\)](#)
59. Boris Jeremić. Soil Uncertainty and Seismic Ground Motion Fourth Geotechnical Earthquake Engineering and Soil Dynamics Conference, Sacramento, California, May 19-22st, 2008.[\(PDF\)](#)

58. Boris Jeremić. On Uncertain Seismic Wave Propagation, First International Conference of the Engineering Mechanics Institute, University of Minnesota, Minneapolis, Minnesota, May 19-21st, 2008.[\(PDF\)](#)
57. Boris Jeremić. Uncertain Elasto-Plasticity, University of Southern California Seminar Series, December 12th, 2007.[\(PDF\)](#)
56. Boris Jeremić. On Computational Simulations and Predictions, UC Davis Geotechnical Seminar Series, November 1st, 2007.[\(PDF\)](#)
55. Boris Jeremić. Seismic Wave Propagation in Stochastic Soils, 4ICEGE, Fourth International Conference on Earthquake and Geotechnical Engineering, Thessaloniki, Greece 25-28 June, 2007.[\(PDF\)](#)
54. Boris Jeremić. The Plastic Domain Decomposition for Soil Foundation Structure Interaction Computations, CompDyn2007, Computational Methods in Structural Dynamics and Earthquake Engineering, Rethymno, Crete, Greece, 13-16 June, 2007.[\(PDF\)](#)
53. Boris Jeremić. Паралелна рачунарска метода прорачуна интеракције земљотреса, тла и конструкције. (Parallel Computational Method for Simulations of Earthquake, Soil and Structures), University of Belgrade, Faculty of Civil Engineering Seminar Series, Belgrade, Serbia, June 5th 2007.[\(PDF\)](#)
52. Boris Jeremić. Numerical Predictions of Soil-Foundation-Structure Interaction. Caltrans Geotechnical Services Educational Seminar Series, Sacramento, California, April 5, 2007.[\(PDF\)](#)
51. Boris Jeremić. Benefits and Detriments of Soil Foundation Structure Interaction: Simulation Platform and Examples. 4th US-Japan Workshop on SSI, Tsukuba, Japan, March 28-30 2007.[\(PDF\)](#)
50. Boris Jeremić. Benefits and Detriments of Soil-Foundation-Structure Interaction. GeoDenver 2007, Geo-Institute Annual Conference, Denver, Colorado, February 19-21, 2007.[\(PDF\)](#)
49. Boris Jeremić. Modeling and Simulations of Liquefied Soils. GeoDenver 2007, Geo-Institute Annual Conference, Denver, Colorado, February 19-21, 2007.[\(PDF\)](#)
48. Boris Jeremić. UCD CompGeoMech Contributions to OpenSees: Deliverables. PEER Annual Meeting, San Francisco, California, January 26-27 2007.[\(PDF\)](#)
47. Boris Jeremić. Piles in Liquefied Soils. PEER Annual Meeting, San Francisco, California, January 26-27 2007.[\(PDF\)](#)
46. Boris Jeremić. High Performance Computing for Fast Hybrid Simulations. CU-NEES 2006 FHT Workshop, Boulder, Colorado, Nov. 2-3 2006.[\(PDF\)](#)
45. Boris Jeremić. The Role of Material Variability and Uncertainty in Elastic-Plastic Finite Element Simulations. First South-East European Conference on Computational Mechanics (SEECM 06), Kragujevac, Serbia, 28-30 June 2006.[\(PDF\)](#)
44. Boris Jeremić. HPC for NEES: Plastic Domain Decomposition Method. NEES Annual Meeting, Washington, District of Columbia, June 21-23, 2006.[\(PDF\)](#)
43. Boris Jeremić. Uncertain Material Parameters and the Stress-Strain Response. Second Japan-U.S. Workshop on Testing, Modeling and Simulation in Geomechanics, Kyoto, Japan, September 8-11, 2005.[\(PDF\)](#)
42. Boris Jeremić. On Uncertainty of Elasto-Plastic Simulations Universitat Politècnica de Catalunya, Barcelona, Spain, June 2005.[\(PDF\)](#)

41. Boris Jeremić. Topics in Contemporary Computational Geomechanics. A 4 day short course. Topics covered included: Large deformation Hyperelasto-Plasticity for Geomaterials, Parallel processing in computational geomechanics, Numerical simulations of coupled behavior for Geomaterials undergoing small and large deformations, Probabilistic approach to the theory of elasto-plasticity. University of Kragujevac, Kragujevac, Serbia and Montenegro, June 2005.
40. Boris Jeremić. Probabilistic Elasto-Plasticity. 25th Yugoslav Congress on Theoretical and Applied Mechanics, Novi Sad, Serbia and Montenegro, June 2005.[\(PDF\)](#)
39. Boris Jeremić. Soil-Foundation-Structure Interaction Simulations: Static and Dynamic Issues. University of California at Los Angeles Seminar Series, UCLA, May 2004.[\(PDF\)](#)
38. Boris Jeremić. A Brief Overview of the NEESgrid Simulation Platform OpenSees: Application to the Soil-Foundation-Structure Interaction Problems. Third Joint United States-Japan Workshop on Soil-Structure Interaction, Menlo Park, California, March 29-30, 2004.[\(PDF\)](#)
37. Boris Jeremić. I-880 Bridge Testbed Simulations: Soil-Foundation-Structure Interaction Issues. PEER Annual Meeting, Palm Springs, California, February 20-21, 2004.[\(PDF\)](#)
36. Boris Jeremić. Enabling Simulation and Information Technologies Solutions Schemes and Challenges for Very large Models. PEER Annual Meeting, Palm Springs, California, February 20-21, 2004.[\(PDF\)](#)
35. Boris Jeremić. Soil-Foundation-Structure Interaction Simulations and OpenSees. OpenSees Users Workshop, Richmond, California, January 2004.[\(PDF\)](#)
34. Boris Jeremić. Интеракција конструкције и тла у току земљотреса: нумеричка анализа. (Structure-soil interaction during earthquakes: numerical analysis) Грађевински Факултет Универзитета у Београду, Децембар, 2003(Civil Engineering Faculty of the University of Belgrade, December 2003).[\(PDF\)](#)
33. Boris Jeremić, COTS (Commodity off the shelf) Clusters. International Workshop on High Performance Computing in Finite Element Analysis, University of Manchester, U.K, 1st - 5th September 2003.[\(PDF\)](#)
32. Boris Jeremić, The Plastic Domain Decomposition Method in Parallel Computational Geomechanics. International Workshop on High Performance Computing in Finite Element Analysis, University of Manchester, U.K. 1st - 5th September 2003.[\(PDF\)](#)
31. Boris Jeremić. Geomechanics Simulations Using OpenSees Platform. OpenSees Users Workshop, August 2003, Richmond, California.
30. Boris Jeremić. Simulation of Local Inelastic Behavior in Large Scale Dynamics Analysis. Seventh U.S. National Congress on Computational Mechanics, July 27-31, 2003, Albuquerque, New Mexico.
29. Boris Jeremić. Soil-Structure-Interaction in Liquefied Grounds and Countermeasures: Lessons from Numerical Studies. 2003 PEER Annual Meeting, Palm Springs, California.
28. Boris Jeremić. Geomechanics Simulations Using OpenSees Platform. OpenSees Users Workshop, August 2002, Richmond, California.
27. Boris Jeremić, Recent Developments in Computational Modeling in Geomechanics, Invited Keynote Presentation. Fifth World Congress on Computational Mechanics, WCCM V, July 2002, Vienna, Austria.

26. Boris Jeremić, Computational Challenges for Seismic Design of Bridges, Invited Presentation. Scientific Computing Seminars Series, National Energy Research Scientific Computing Center, Lawrence Berkeley National Laboratory, August 2002.
25. Boris Jeremić, Earthquake Engineering Simulation Grid, Invited Presentation. Structural Engineering Seminar Series, March 2002, University of California at San Diego, La Jolla, California.
24. Boris Jeremić, Challenges in Numerically Simulating Seismic Behavior of Constructed Facilities, Invited Presentation. Bay Area Scientific Computing Day 2002, March 2002, Sandia National Laboratories, Livermore, California.
23. Boris Jeremić, Recent Developments in Computer Simulations and Visualization for Geotechnical Earthquake Engineering Problems, Invited Presentation. International Workshop on Earthquake Simulation in Geotechnical Engineering, November 2001, The George S. Dively Center, Case Western Reserve University, Cleveland, Ohio.
22. Boris Jeremić. Geotechnical applications with OpenSees OpenSees Users Workshop, August 2001, Richmond, California.
21. Boris Jeremić. Geotechnical Elements and Material Models OpenSees Developers Workshop, August 2001, Richmond, California.
20. Boris Jeremić. Large Deformation Coupled Formulation for Liquefaction Analysis Sixth U.S. National Congress On Computational Mechanics, August, 2001 Dearborn, Michigan.
19. Boris Jeremić. Dynamic Behavior of Pile Group Foundations During Strong Earthquake Events, Invited Presentation. The 2001 Joint Summer Meeting of American Society of Mechanical Engineers (ASME) American Society of Civil Engineers (ASCE) and Society of Engineering Science (SES), San Diego, July, 2001.
18. Boris Jeremić. Finite Element Methods for 3D Slope Stability Analysis. GeoDenver 2000, Geo Institute Annual Conference, Denver, Colorado, August, 2000.
17. Boris Jeremić. Modeling of Continuous Localization of Deformation. 13th ASCE Engineering Mechanics Specialty Conference, The Johns Hopkins University, Baltimore, MD, USA June, 1999.
16. Boris Jeremić. Finite Element Modeling of Failure in Geotechnical Engineering, Invited Presentation. University of California, Davis, California, April 1999.
15. Boris Jeremić. Elasto-Plasticity and the Finite Element Method: Mathematical Formulation. Presented at the Department of Mathematics and Computer Sciences Seminar Series at Clarkson University, Potsdam, New York, September 1998.
14. Boris Jeremić, Kenneth Runesson, and Stein Sture. Large deformation constitutive integration algorithm. Presented at the 12th ASCE Engineering Mechanics Conference, La Jolla, California, May 1998.
13. Boris Jeremić, Kenneth Runesson, and Stein Sture. Coaxiality of elastic and plastic strain tensors in large deformations. Presented at the Thirteen U.S. National Congress of Applied Mechanics, Gainesville, Florida, June, 1998.
12. Boris Jeremić. Finite Element Modeling of Large Deformation Elasto-plastic Problems in Geotechnics, Invited Presentation. University of California, Davis, California, April 1998.

11. Boris Jeremić. Finite Deformation Elasto-plastic Problems in Solid Mechanics of Pressure Sensitive Materials. Presented at the Department of Mechanical and Aeronautical Engineering Seminar Series at Clarkson University, Potsdam, New York, April 1998.
10. Boris Jeremić and Stein Sture. Globally convergent modification of the implicit integration schemes in soil elastoplasticity. *The 1997 Joint Summer Meeting of the American Society of Mechanical Engineers, American Society of Civil Engineers and the Society of Engineering Science*, Northwestern University, Evanston, Illinois, July, 1997.
9. Boris Jeremić, Kenneth Runesson, and Stein Sture. Invited Presentation: Elastoplastic analysis of pressure sensitive materials subjected to large deformations. Presented at the *1997 Joint Summer Meeting of the American Society of Mechanical Engineers, American Society of Civil Engineers and the Society of Engineering Science*, Northwestern University, Evanston, Illinois, July, 1997.
8. Boris Jeremić. Consistent Computations in Elasto–Plasticity of Geomaterials, Invited Presentation. University of Minnesota, Minneapolis, Minnesota, April 1997.
7. Boris Jeremić. Consistent Computations in Elasto–Plasticity of Geomaterials, Invited Presentation. Clarkson University, Potsdam, New York, April 1997.
6. Boris Jeremić. Consistent Computations in Elasto–Plasticity of Geomaterials, Invited Presentation. University of Texas, Austin, Texas, March 1997.
5. Boris Jeremić and Stein Sture. Refined solution procedures for finite element analysis in geotechnics. Presented at the CAMM seminar 96/2, Center for Acoustics, Mechanics and Materials, University of Colorado, October 1996.
4. Boris Jeremić. Object oriented numerical computations: Applications in continuum mechanics. Presented at the Geotechnical Engineering seminar series, University of Colorado at Boulder, October 1996.
3. Boris Jeremić and Stein Sture. Refined finite element analysis of geomaterials. Presented at 11th ASCE Engineering Mechanics Conference, Fort Lauderdale, Florida, May 1996.
2. Boris Jeremić, Dunja Perić, Teng-Fung Yang, Stein Sture, Hon-Yim Ko, and Y. Atsushi. The elasto plastic material model: Model description and numerical predictions. Presented at the VELACS extension project meeting at M.I.T. October, 1995.
1. Boris Jeremić and Stein Sture. Implicit integrations in geoplasticity. Presented at 10th ASCE Engineering Mechanics Conference, Boulder, Colorado, May 1995.