

Presentations and Talks

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Recent presentations are available in PDF below

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.
69. Boris Jeremić, Kallol Sett, Lev Kavvas and Suzana Korprivica. 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, GGeoMat: 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, GGeoMat: 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, GGeoMat: 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, GGeoMat: 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, GGeoMat: 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 shourt 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.