Publications by B.A. Schrefler

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179. "A multiphase model for concrete: numerical solutions and applications" (with F. Pesavento, D. Gawin), invited lecture, 2nd WSEAS International Conference on Applied and Theoretical Mechanics (MECHANICS '06), Venice, Italy, November 20-22, 2006, Ass. Eds: D. Mijuca, S. Maksimovic), ISSN: 1790-5095, ISSN: 1790-5117, ISBN: 960-8457-56-4, 2006.
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181. "A General Framework for Modelling Long Term Behaviour of Earth and Concrete Dams" (with F. Pesavento, S. Secchi, L. Simoni), Keynote Lecture, LTBD09, 2nd International Conference on Long Term Behaviour of Dams, Graz, Austria, October 12-13, 2009.
182. "Steps towards real time solution of fire in tunnels" (with F. Pesavento, F. Chinesta, and A. Leygue), plenary lecture, Proc. ThermaComp 2011, (X K Li, N Massarotti, P Nithiarasu, eds), Dalian, China, September 5-7, 2011.
183. "Identification of steady state flow in porous media using Artificial Neural Networks" (with M. Lefik and D.P. Boso), paper ESDA2012-82948, ESDA2012, ASME 2012 111th Biennial Conference of Engineering Systems Design and Analysis, Nantes, July 2-4, 2012.
184. "Modelling chemical processes in cement based materialsby means of multiphase porous media mechanics" (with F.Pesavento, D. Gawin, M. Koniorczyk), paper ESDA2012-82932, , ESDA2012, ASME 2012 111th Biennial Conference of Engineering Systems Design and Analysis, Nantes, July 2-4,, 2012.
185. "2D and 3D Numerical Analysis of Fluid Pressure Induced Fracture" (with S. Secchi), Poromechanics V: pp. 2093-2102 ASCE, 2013, doi: 10.1061/9780784412992.247
186. "The three-fluids model for concrete and beyond", Proceedings CONCREEP 10, Mechanics and Physics of Creep, Shrinkage, and Durability of Concrete and Concrete Structures, 2015, 68-77, September 21-13, Vienna, Austria
187. "Coupled numerical simulation of fire in tunnel" (with F. Pesavento, M. Pachera, D. Gawin. A. Witek). COMPUTER METHODS IN MECHANICS (CMM2017): Proceedings of the 22nd International

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188. “Indagini e modelli per la verifica sismica di edifici storici” (with C. Modena, E. Cescatti, F. Lorenzoni), Proceedings International Seminar CIAS, Dubai, 15-23 marzo 2019, 35-54, ISBN: 978-88-941941-1-1

Oral presentations (from 2004)

1. “To save or destroy Venice?” (with R. Bertani, A. Menin, F. Pesavento, G. Salemi, V. Salomoni), Invited lecture, Seminar FE im Schnee, January 14-18, 2004.
2. “A multiphase model for concrete with application to high temperature and young concrete” (with D. Gawin, and F. Pesavento), invited lecture, 7th National Congress on Mechanics, Chania, Crete, Greece, June 24-26, 2004.
3. “Multiphase models in dam engineering” Problemi strutturali nell’ingegneria delle dighe, Rome, Accademia dei Lincei, February 26-27, 2004.
4. “Cohesive fracture and multifield problems”, seminar, CNAM, Paris, Mars 15, 2004.
5. “Concrete at high temperatures” MACSI-net final meeting, Brussels, DG12, May 18, 2004.
6. “Determination of soil constitutive laws through particle mechanics approach” (with A. Nardin), WCCM VI in conjunction with APCOM 04, Beijing, September 5-10, 2004.
7. “A Multiscale Model for Superconducting Strands and Triplets” (with D.P. Boso, and M. Lefik), Seminar, MIUR Centre of Excellence: Science and Applications of Advanced Computing Paradigms Workshop, Padua, October 28-29, 2004.
8. “Training of researchers” KMM-Noe Kick off meeting, Warszawa, November 6, 2004.
9. “Cracking in cohesive materials: a multifield approach” (with S. Secchi, and L. Simoni), Structural Safety Assessment of Dams, NW-IALAD workshop, CISM, Udine, December 14-17, 2004.
10. “Modelling of aging and deterioration phenomena” (with D. Gawin, and F. Pesavento), Structural Safety Assessment of Dams, NW-IALAD workshop, CISM, Udine, December 14-17, 2004.
11. “Multiscale analysis of superconducting coils” (with D.P. Boso, and M. Lefik), 1st KMM NoE Information Workshop, Seeheim, Germany, January 23-25, 2005.
12. “A multifield approach for cracking in plane concrete” (with S. Secchi, and L. Simoni), invited lecture, EUROMECH Colloquium 460 Numerical Modelling of Concrete Cracking, February 21-23, 2005.
13. “Modelling of concrete at high temperatures with application to fire in tunnels” (with A. Bacchetto, D. Gawin, C.E. Majorana, and F. Pesavento), seminar, TNO, Delft, April 18, 2005.
14. “Multiphysics coulpling in tunnel fire modelling” (with A. Bacchetto, D. Gawin, C.ER. Majorana, F. Pesavento, R. Codina, and J. Principe), seminar, LMT, ENS Cachan, May 12, 2005.
15. “Multiphysic coupling: modelling of fires in tunnels”, seminar, Université Marne la Vallée, May 16, 2005.
16. “Coupling strategy between a multiphase model for concrete and a stabilized CFD code to simulate fire effects in tunnels” (with A. Bacchetto, R. Codina, and J. Principe), Coupled Problems 2005, May 25-27, 2005.
17. “Multiscale Modelling for Composites Including Continuum to Discrete Linkage” (with D.P. Boso, and M. Lefik), keynote lecture, Euromech Colloquium 468: Multi-Scale Modelling in the Mechanics of Solids, St. Petersburg (Repino), June 29-July 1, 2005.
18. “Three-Scale bridging for the non linear analysis of composites” (with D.P. Boso, and M. Lefik), plenary lecture, Congress on Numerical Methods in Engineering, Granada, July 4-7, 2005.
19. “Multiscale methods for the thermomechanical analysis of composites” (with D.P. Boso, and M. Lefik), seminar, University of Wales, Cardiff, July 21, 2005.

20. "Superconducting intermetallics: properties and applications" (with D. P. Boso), KMM NoE - First Integration Summer School, Udine, September 12-14, 2005.
21. "Hydraulic fracturing in multiphase geomaterials" Workshop on Modelling Coupled Processes, 19-20 September, Utrecht, the Netherlands.
22. "Hydraulic fracturing in saturated geomaterials" (with S. Secchi, and L. Simoni), Alert School, Aussois, October 10-17, 2005.
23. "Finite element analysis of strain localization in multiphase materials" (with L. Sanavia), Alert-RJCGL-DIGA Graduate School, Aussois, October 13-16, 2005.
24. "New data about surface subsidence above gas reservoirs and CO_2 injection", Alert School, Aussois, October 10-17, 2005.
25. "Simulation von Tunnelbränden", invited lecture, VIATEC, Bolzano, February 8, 2006.
26. "Simulazione di incendi in galleria", invited lecture, Istituto Internazionale di Ricerca, Rome, March 8, 2006.
27. "Concrete at high temperatures", seminar, CEA, Saclay, France. March 29, 2006.
28. "Material modelling by means of molecular dynamics" (with D.P. Boso, C. Gambato, L. Colombo), invited lecture, Lausanne Technet Alliance Spring Forum, Lausanne, April 7-8, 2006.
29. "Four scale bridging in the simulation of superconducting coils", seminar, Universitè Marne la Valée, April 27, 2006.
30. "Thermo-Mechanics of Superconducting Coils for Fusion Reactors" (with D.P. Boso, and M. Lefik), invited lecture, Challenges in Computational Mechanics, Cachan, May 10-12, 2006.
31. "Large scale computing in civil and materials engineering", invited lecture, SEDS06, Bertinoro, Italy, May 15, 2006.
32. "Towards prediction of thermal spalling risk by means of porous media mechanics" (with F. Pesavento, D. Gawin), 3rd Conference on Computational Solid and Structural Mechanics ECCM2006, Lisbon 5-8 June, 2006.
33. "Hierarchical Homogenization Including Artificial Neural Networks for the Non Linear Thermo-Mechanical Analysis of Superconducting Coils" with (D.P. Boso, and M. Lefik), plenary lecture, Seventh World Congress on Computational Mechanics (WCCM VII), Los Angeles, California, July 16 - 22, 2006.
34. "Modelling creep and shrinkage of concrete by means of porous media mechanics" (with F. Pesavento, and D. Gawin), 6th European Solid Mechanics Conference ESMC2006, Budapest, Hungary, 28 Aug - 1 Sep 2006.
35. "Problemi pluridisciplinari nell' ingegneria", opening lecture, 2nd annual meeting of the Italian Academy of Sciences (detta dei XL), Lecce, October 3, 2006.
36. "New data about surface subsidence in Ravenna", invited lecture, Conference on Problems of Geo-Engineering, Piacenza, October 7, 2006.
37. "Gekoppelte Mehrfeldprobleme und ihre numerische Lösung", lectio doctoralis, Leibnitz University, Hanover, November 30, 2006.
38. "Multiscale analysis of ITER superconducting coils and tunnel behaviour during fires: two computing intensive multidisciplinary problems" (with D.P. Boso, F. Pesavento, M. Lefik, and R. Codina), invited lecture, 20th ORAP Forum High Performance Computing, Paris, December 13, 2006.
39. "ITER superconducting cable: from filament strain after cool-down to filament strain due to energisation" (with D.P. Boso, and M. Lefik), invited lecture, ITER Nb3Sn Conductor Modeling Workshop, Aix en Provence, January 15-17, 2007.
40. "Fluid pressure induced fracture", invited lecture, Hydrosim Reserch Committee, Fukuoka, Japan, January 31, 2007.
41. "Hydraulic fracturing", seminar, the University of Nagoya, February 2nd, 2007.
42. "Superconducting cable modelling" (with D.P. Boso), Cadarache, ITER meeting, February 22, 2007.
43. "Multidisciplinary problems in engineering and their solution", seminar, Doctoral School, Politecnico di Milano, March 15, 2007.
44. "Hydraulic fracturing", seminari leccesi di meccanica strutturale, University of Lecce, March 16, 2007.
45. "Modelling of fire in tunnel", seminar, ONERA, Paris, April, 18, 2007.
46. "A time-discontinuous Galerkin Formulation for the mechanical behaviour of saturated porous media" (with S. Secchi, and L. Simoni), Int. ECCOMAS Conf. on Coupled Problems, Santa Eulalia, Ibiza, Spain, 21-23 May 2007.

47. “Computational problems in fusion technology” (with D.P.Boso, and M. Lefik), plenary lecture, CMNE / CILAMCE 2007, Congress on Numerical Methods in Engineering, Porto, June 13-15, 2007.
48. “Computational fusion technology: the superconducting coil analysis” (with D.P. Boso, and M. Lefik), plenary lecture, CMM-2007 – Computer Methods in Mechanics, Łódź–Spała, Poland, June 19–22, 2007.
49. “Multidisciplinary problems in civil, environmental and materials engineering”, lectio professoralis, Dalian University of Technology, August 15, 2007.
50. “A multidisciplinary approach for the numerical simulation of fire in tunnels” (with F. Pesavento, R. Codina, J. Principe), invited lecture, in Proc. of EUROTUN 2007 “Computational Methods in Tunnelling”, Vienna, Austria, August 27-29, 2007.
51. “Use of intermetallics for superconducting coils” (with D.P. Boso, and M. Lefik), KMM NoE - 3rd Summer School, Udine, September 17-19, 2007.
52. “Multiscale thermo-electro-mechanical analysis of superconducting coils for ITER” (with D.P. Boso, and M. Lefik), keynote lecture, Tenth EM Symposium, Lunteren, October 11-12, 2007.
53. “Multidisciplinary problems in computational fusion technology” (with D.P. Boso, and M. Lefik), plenary lecture, COMPLAS 2007, IX International Conference on Computational Plasticity, Barcelona, September 5-7, 2007.
54. “Interdisciplinary problems in engineering”, seminar, Chuo University, Tokyo, November 29, 2007.
55. “Stress measures in partially saturated porous media mechanics” seminar (with W. Gray, and F. Pesavento), Chuo University, Tokyo, November 29, 2007.
56. “Integrated model for fire in tunnels” seminar, Chuo University, Tokyo, November 30, 2007.
57. “Thermo-electro-mechanically coupled problems for superconducting coils” (with, D.P. Boso, and M. Lefik), plenary lecture, APCOM’07 in conjunction with EPMESC XI, Kyoto, December 3-6, 2007.
58. “Modeling of cementitious materials by means of a multiphysics approach” (with D. Gawin, and F. Pesavento), ECCOMAS Multidisciplinary Jubilee Symposium, EMJS 2008, Vienna, (Austria), February 18-20, 2008.
59. “Stress measures in partially saturated porous media mechanics” (with F. Pesavento and W.G. Gray), invited lecture, ICTAM 2008, XXII International Congress of Theoretical and Applied Mechanics, Adelaide, Australia, 24–30 August 2008.
60. “Multiphase model for concrete”, seminar, Laboratoire Central des Ponts et Chaussées, Paris, Mars 3rd. 2008.
61. “Multiphase model for concrete and industrial applications”, opening lecture of the doctoral school Bewertung gekoppelter numerischer Partialmodelle im Konstruktiven Ingenieurbau, Bauhausuniversität Weimar, June 6, 2008.
62. “Stress measures in partially saturated porous media mechanics and applications to concrete modelling”, seminar, University of New South Wales, Sydney, September 1st, 2008.
63. “Stress measures in partially saturated soil mechanics”, ALERT workshop, Aussois, October 6, 2008.
64. “Coupled problems in environmental engineering and in nuclear fusion technology”, invited lecture, EC-ECCOMAS Delegation meeting, DG-12, Bruxelles, December 18, 2008.
65. “Modeling of cementitious materials by means of a multiphysics approach” (with F. Pesavento, and D. Gawin), Keynote Lecture, AFRICOMP’09, 1st African Conference of Computational Mechanics, Sun City, SouthAfrica, January 7-11, 2009.
66. “Integrated simulation of tunnel fires”, Seminar, BG Engineering, Lausanne, February 9, 2009.
67. “Simulation of fire resistance and durability of concrete” (with F. Pesavento, and D. Gawin), invited lecture, SEDUREC2009, Safety and Durability of Constructions. Barcelona, February 25-27, 2009.
68. “A multiscale/multiphysics model for concrete” (with F. Pesavento, and D. Gawin), MMCM 2009, Colloquium on Multiscale Methods in Computational Mechanics, Rolduc. The Netherlands, March 11-13, 2009.
69. “Modelling of cementitious materials by means of a multi physics approach”, Seminar, EPFL, Lausanne, March 19, 2009.

70. “Large Scale Computation of Civil, Environmental and Material Engineering Problems“ Invited Lecture, Colloquia for Scientific Computation, University of Padua, May 11, 2009.
71. “Numerical Modelling of Non-isothermal Calcium Leaching Process in Cementitious Materials” (with F. Pesavento, and D. Gawin), CMM 2009, 18th International Conference on Computational Methods in Mechanics, Zielona Gora, Poland, May 18-21, 2009.
72. “Large Scale Problems in Civil, Environmental and Material Engineering” Seminar, University of Technology, Lodz, Poland, May 22, 2009.
73. “Modelling of Structural Repairwork in Concrete Structures” Seminar, Brenner Motorways, Trento, June 19, 2009.
74. “A Multidisciplinary Approach in the Simulation of Concrete Modelling: Mathematical Model and Industrial Applications” (with F. Pesavento, D. Gawin, C.E. Majorana, and G. Sciumé), Concrete Solutions 2009, 3rd International Conference on Concrerte Repair, Padua amd Venice, June 29 – July 2nd, 2009.
75. “Artificial Neural Networks to Model the Non-linear Behaviour of Hierarchical Composites” (with D.P. Boso, M.J. Lefik), COMPLAS X, X International Conference on Computational Plasticity, Barcelona, September 2-4, 2009.
76. “A Thermodynamically Consistent Multiscale and Multyphysics Model for Concrete” (with F. Pesavento, D. Gawin, and W.G. Gray), Plenary lecture, COMPLAS X, X International Conference on Computational Plasticity, Barcelona, September 2-4, 2009.
77. “Design and Construction of Scientific Apparatuses at the University of Padua”, XXII CTA, Conference on Steel Constructions, Padua, September 28-30, 2009.
78. “A Thermodynamically Consistent Multiscale and Multyphysics Model for Concrete and its Offsprings for Industry” (with F. Pesavento, and D. Gawin), Seminar, Eindhoven University of Technology, October 6, 2009.
79. “Actual Problems in the Study of Soil Dynamics of the Upper Adriatic Sea” (with G. Ricceri, V. Achilli, M. Fabris, L. Laloui), Invited Lecture, Conference on the Nature and Geodynamics of the Lithosphere of the Upper Adiatic Sea, Venice, November 5-6, 2009.
80. “Subsidence above gas reservoirs and CO_2 injection”, Seminar, LMS, ENAC, EPFL, Lausanne, November 20, 2009.
81. “Research at CISM”, 40th Anniversary of the Foundation of CISM, Udine, December 5, 2009.
82. “A general framework for TCHM modelling of concrete” (with F. Pesavento and D. Gawin), invited lecture, International Workshop on Control of Cracking in R.C. Structures: a major step towards serviceability, Paris, December 1-11, 2009.
83. “Ein thermo-chemo-hydro-mechanisches Betonmodell und seine Anwendungen in der Industrie“, Seminar, IMWS, TU Vienna, January 27, 2010.
84. “TCHM modeling of porous media”, Seminar, ACES, UT at Austin, March 2nd, 2010.
85. “Chemo-thermo-hydro-mechanical modeling of porous media”, Aerospace Engineering Special Seminar, Texas A&M University, College Station, March 9, 2010.
86. “Capillary effects related to compaction of gas reservoirs and CO_2 injection”, seminar, Center for Subsurface Modeling, ICES, UT at Austin, March 12, 2010.
87. “Multi-physics modelling of porous media”, seminar, Department of NanoMedicine and BioMedical Engineering (nBME), Health Science Center at Houston, The University of Texas, March 19, 2010.
88. “Artificial Neural Networks for Modeling of Material Behaviour”, Seminar Department of NanoMedicine and BioMedical Engineering (nBME), Health Science Center at Houston, The University of Texas, March 31, 2010.
89. “Interaction Problems between Different Fields and their Numerical Solution”, Lectio Doctoralis, Ecole Normale Superieure, Cachan, France, April 9, 2010.
90. “Numerical procedures for non linear analysis of composites” (with D. Boso), Invited Lecture, Session E-CAERO, ECCM2010, IV European Conference for Computational Mechanics, Paris, 17-21 May 2010.

91. “Three-dimensional staggered finite element modeling of thermo-hygro-mechanical behaviour in porous media with random properties“ (with S. Dal Pont, F. Meftah), ECCM2010, IV European Conference for Computational Mechanics, Paris, 17-21 May 2010.
92. “Recent past, present and future of CISM”, 40th Anniversary of CISM foundation, CISM Past and Future of its Mission, Udine, May 15, 2010.
93. “Filament, strand and conductor analyses carried out at Padua” Seminar, Fusion for Energy F4E, Barcelona, June 4, 2010.
94. “Computationally intensive problems in structural, environmental, and fusion engineering” (with D. Boso, F. Pesavento, and L. Sanavia), workshop on Algorithms and Architectures for Computational Science and Engineering AACSE, University of Padua, July 1-2, 2010.
95. “Thermo-chemo-hydro-mechanical modelling of porous media”, Seminar, Department of Civil Engineering, Center for Advanced Materials and Structures, National University of Singapore, July 12, 2010.
96. “A multiphase model for concrete: the reference model, possible simplifications and industrial applications” (with F. Pesavento, D. Gawin, A. Bertoldo, S. Dal Pont, F. Meftah, R. Nanhorngue, and G.Sciumè) Semiplenary Lecture WCCM 2010, Sydney, July, 19-23, 2010.
97. “Capillary effects in hydrocarbon exploitation and CO_2 injection”, seminar, Department of Civil and Environmental Engineering, University of New South Wales, Sydney, August 5, 2010.
98. “Generalized selfconsistent like method and other procedures for the numerical homogenization of fibrous composites in the coupled thermo-mechanical field” (with D. Boso and M. Lefik), Session Keynote lecture, 37th Solid mechanics Conference SolMech2010, Warsaw, Poland, September 6-10, 2010.
99. “Capillary effects in hydrocarbon exploitation and CO_2 injection and advanced constitutive models”, Seminar, Faculty of Civil Engineering, Architecture and Environmental Engineering, Technological University of Lodz, September 9, 2010.
100. “Numerical homogenization of fibrous composites using the generalized self-consistent method”, (with D.P. Boso and M.J Lefik), XVIII Convegno Italiano di Meccanica Computazionale, Siracusa, September 22-24, 2010.
101. “Numerical analysis of fluid induced fracture”, Seminar, Ecole Centrale de Nantes, February 23, 2011.
102. “Modelling alkali-silica reaction under non-isothermal conditions in partially saturated cementitious materials” (with F. Pesavento, L. Simoni, D. Gawin, and M. Wyrczykowski), Invited Lecture, Mechanics and Physics of Porous Media, A tribute to late Pr. Olivier Coussy, ENPC, Paris, April 18, 2011.
103. “Fire in tunnels: steps towards a real time solution”, Seminar, EPFL, ENAC, Lausanne, May 5, 2011.
104. “Mathematical and numerical multiscale modelling” (with D.P. Boso, F. Pesavento, D. Gawin, and M. Lefik), Plenary Lecture, CMM 2011, Warsaw, Poland, May 9-13, 2011.
105. “Steps towards a real time solution of fire in tunnels”, Seminar, Faculty of Civil Engineering, Architecture and Environmental Engineering, Technological University of Lodz, May 14, 2011.
106. “Ongoing research activities in structural and material engineering”, workshop on Algorithms and Architectures for Computational Science and Engineering AACSE, University of Padua, June 30-July 1, 2011.
107. “General multiphase model for concrete”, Seminar, Bauhaus Summer School on Simulation and Model Validation, Weimar, August 16, 2011.
108. “Concrete at early ages and structural repair”, Seminar, Bauhaus Summer School on Simulation and Model Validation, Weimar, August 16, 2011.
109. “Mechanics of porous media: from geomaterial to tumor growth modelling”, (with G. Sciumè, S.A. Shelton, W.G. Gray, C.T. Miller, F. Pesavento, P. Decuzzi, and M. Ferrari), Plenary Lecture, COMPLAS XI, Barcelona, September 7, 2011.

110. “A multiphase porous media mechanics model for tumor growth modeling”, (with G. Sciumé, S.E. Shelton, W.G. Gray, C.T. Miller, M. Ferrari, and P. Decuzzi), Seminar, Research Highlights, The Methodist Hospital Reserch Institute, Houston, December 7, 2011.
111. “A multiphase porous media mechanics approach to tumor growth modeling”, (with G. Sciumé, S.E. Shelton, W.G. Gray, C.T. Miller, M. Ferrari, and P. Decuzzi), Seminar, University of Houston, January 13, 2012.
112. “Tumor growth modeling from the perspectives of multiphase porous media mechanics”, lecture, The Methodist Hospital research Institute, Houston, January 16, 2012.
113. “Tumor growth modeling from the perspectives of multiphase porous media mechanics”, private seminar, KTH, Stockholm, Campus Flemingsberg, School of Technology and Health, Division of Neuronic Engineering, February 9, 2012.
114. “A multiphase porous media mechanics approach to tumor growth modeling”, Seminar, EC-Nantes, March 1st, 2012.
115. “Tumor growth modeling from the multiphase porous medium mechanocs perspectives”, Lecture, Department of Oncological and Surgical Sciences, University of Padua, March 15, 2012.
116. “Thermodynamically Constrained Averaging Theory: An Application to Tumor Growth modelling” (with G. Sciumè, S.E. Shelton, W.G. Gray, C.T. Miller,F. Hussain, M. Ferrari, P. Decuzzi), Lifetime Achievement Award Lecture, Icces’12, Chania, Crete, May,1st, 2012.
117. “FEM Class of 42” Thank You Address, FEM 42 Meeting, Barcelona, May 8, 2012.
118. “Modelling chemical processes in cement based materials by means of multiphase porous media medhanics” (with F. Pesavento, D. Gawin, M. Koniorczuk), Lecture, ESDA 2012, ASME 2012 111th biennial Conference of Engineering Systems Design and Analysis, Nantes, July 3, 2012.
119. “Multiphysics modelling of flowslides initiation” (with R. N. Nanhornguè and L Sanavia), Lecture MS02 Mechanics of Natural Disasters, XXIII ICTAM, Beijing, August 21, 2012.
120. “Tumor growth modelling fom the perspective of multiphase poroes media mechanics”, (with G. Sciumè, S.E. Shelton, W.G. Gray, C.T. Miller,F. Hussain, M. Ferrari, P. Decuzzi), Lecture, Workshop on Virtual Materials, Peking University, Beijing, August 25, 2012
121. “A tumor growth model based on the thermodynamically constrained averaging theory”, (with G. Sciumè, S.E. Shelton, W.G. Gray, C.T. Miller,F. Hussain, M. Ferrari, P. Decuzzi), Semiplenary lecture, ECCOMAS2012, Vienna September 11, 2012.
122. “Numerical and experimental analysis of fluid induced fracture”, Seminar, University of Houston, December 6, 2012.
123. “A multiphase model for three dimensional tumor growth: a step towards drug delivery modelling”, Seminar, TU Wien, Januray 30, 2013.
124. “A multiscale multiphysics model for prediction of tumor growth”, invited lecture, Advances in Computational Mechanics, A Conference celebrating the 70th Birthday of Thomas J.R. Hughes, San Diego, February 27, 2013.
125. “A model for prediction of tumor growth based on three-phase flow in a deforming prous medium”, Seminar, LadHyx, Ecole Polytechnique, Paris, Mars 28, 2013.
126. “Fully coupled FE simulation of fire in tunnels: from fire scenario to structural response”, (with F. Pesavento, M. Antonello, J. Principe, R. Codina), plenary lecture, EURO:TUN 2013 III Int. Conf. on Computational Methods in Tunneling and Subsurface Engineering, Bochum, April 17, 2013.
127. “Structural effects in case of tunnel fires” invited lecture, Workshop iTUNNEL, GSA, Udine, July 3 and 4, 2013.
128. “2D and 3D numerical and experimental analysis of fluid pressure induced fracture” (with S. Secchi, J.M. Huyghe, E.W. Remij), plenary lecture, Biot2013, Vienna, July 11, 2013.
129. “A model for prediction of tumor growth based on three-phase flow in a deforming prous medium”, Seminar, CRO –Center for Oncological Research, Aviano July 17, 2013.
130. “Modeling of interaction phenomena in tumor growth”, (with G. Sciumè), plenary lecture, XII COMPLAS, Barcelona, September 5, 2013.

131. “2D and 3D numerical analysis of fluid induced fracture” (with S. Secchi), Lecture, Workshop High Performance Scientific Computing, Strategic Research Project AACSE – Algorithms and Architectures for Computational Science and Engineering, Padova, September 19, 2013.
132. “A multiphase model for the prediction of tumor growth: a step towards drug delivery simulation” plenary lecture, Int. CAE Conference, Pacengo del Garda, October 21, 2013.
133. “A multiphase model for tumor growth: interaction between tumor and host cells” (with G. Sciumè), lecture,Vinci II Workshop on Multiphysics Modelling of Concrete and Heterogeneous Materials, ENS Cachan, October 25, 2013.
134. “Modeling of interaction phenomena in tumor growth”, President’s Distinguished Lecture Series in Engineering, Science and Medicine-2013, Texas Tech University, Lubbock, November 18, 2013.
135. “Hydraulic fracture modeling and its peculiarities”, Seminar, Cullen College of Engineering, Department of Civil and Environmental Engineering, University of Houston, November 26, 2013.
136. “Modeling tumor growth with multiphase porous media mechanics” Seminar, SISSA Trieste, February 5, 2014.
137. “Was hat Physik mit Krebsforschung zu tun?” Dissemination Lecture, Lions Club Meran Host, Meran, April 3, 2014.
138. “Mechanics of Ageing: from Building- to Biological Materials” Plenary Key note, AMS'14, 1st International conference on Ageing of Materials and Structures, Delft, The Netherlands, May 27, 2014.
139. “Beyond Geomaterials”, Closing lecture, 6°ALERT – Olek C. Zienkiewicz Course on, seminar Advanced Numerical Modelling in Geomechanics, ETS Caminos, Canales y Puertos, Madrid, June 6, 2014.
140. “Multi-field and multi-scale problems in engineering” seminar, Ecole Nationale Superieure des Travaux Publics, Youndé, Cameroon, July 11, 2014.
141. “Tip advancement and pressure distribution in hydraulic fracturing” (with S. Secchi, P. Rizzato, and J.M.R. Huyghe), lecture, WCCM XI, ECCM V, ECFD VI, Barcelona, July 20-25, 2014.
142. “The role of the solid phase in tumor growth modeling”, semi-plenary lecture, WCCM XI, ECCM V, ECFD VI, Barcelona, July 20-25, 2014.
143. “Tip advancement and pressure distribution in hydraulic fracturing”seminar, SISSA, Trieste, September 23, 2014
144. “Interaction between crack tip advancement velocity and fluid velocity in fracturing saturated porous media” seminar, University of Trento, December 16, 2014
145. “Modelling of multi-field fracturing” (with L. Simoni), lecture, Africomp15, Marrakech, January 7, 2015.
146. “Hydraulic fracture”, lecture, Mumolade Winterschool, Marie Curie Training Network, Padua, January 20, 2015
147. “Beyond geomaterials”, lecture, Mumolade Winterschool, Marie Curie Traning Network, Padua, January 20, 2015
148. “The role of the extracellular matrix in tumor growth modeling”, seminar, Cullen College of Engineering, Department of Civil and Environmental Engineering, University of Houston, February 11, 2015.
149. “Modelling of fracturing in fluid saturated porous media”, President’s Distinguished Lecture Series in Engineering, Science and Medicine-2015, Department of Mechanical Engineering, Texas Tech University, Lubbock, February 23, 2015.
150. “Modelling of fracture in fluid saturated porous media” (with P. Rizzato, L. Simoni, S. Secchi, J.M. Huyghe, E. Milanese and J.F. Molinari) invited lecture, Interpore, Padua, May 20, 2015
151. “Pressure and stress fluctuations around the crack tip in fracturing saturated porous media”, (with J.M.R. Huyghe, E. Milanese, J.F. Molinari, E. Remij, P. Rizzato,S. Secchi, L. Simoni) invited lecture, ESMC 2015, Madrid, July 9, 2015

152. “Meso- and macro-mechanical analysis of fracturing fluid saturated porous media”, seminar, Cullen College of Engineering, Department of Civil and Environmental Engineering, University of Houston, November 5, 2015.
153. “Meso- and macro-mechanical simulation of hydraulic fracturing”, President’s Distinguished Lecture Series in Engineering, Science and Medicine-2015, Bob L. Herd Department of Petroleum Engineering, Texas Tech University, Lubbock, November 13, 2015.
154. “Meso- and macro-mechanical simulation of fracturing in fluid saturated porous media”, Kolloquium über neuere Arbeiten auf dem Gebiete der Mechanik und Strömungslehre an der Technischen Universität Wien, TU Vienna, January 27, 2016.
155. “Teaching and Experiments in Civil and Environmental Engineering”, Inaugural lecture, Ecole Nationale Supérieure des Travaux Publics – University of Technology, Youndé, Cameroun, Mars 17, 2016.
156. “Modeling vascular tumor growth and drug delivery”, Seminar, Lehrstuhl für numerische Mechanik, TUM, July 4, 2016.
157. “Oncologia e Fisica - Nuove prospettive di ricerca” Dissemination lecture, Rotary Club Padova, July 13, 2016.
158. “Transport Oncophysics: Modeling of vascular tumor growth and drug delivery” Invited lecture in Memory of Mr. Qian Lingxi, Symposium for the Inaugural Ceremony of The International Research Center for Computational Mechanics, Dalian Technical University, Dalian, Cina, July 22, 2016.
159. “Shear and mixed mode fracture in disordered saturated porous media” (with E. Milanese, Y. Okan, and J.F. Molinari), lecture, XXIV ICTAM, August, 25, 2016, Montreal, Canada.
160. “Was hat Physik mit Krebsforschung zu tun?“ Public Lecture, Tag der offenen Tür, Technical University of Munich, IAS, Garching, 22 October 2016.
161. “Fisica applicate all’oncologia” Lectio Magistralis (prolusione), Accademia Galileiana, Padova, November 6, 2016.
162. “A multiphase porous media model for transport oncophysics”, Seminar, Dipartimento di Ingegneria Civile ed Architettura, Università di Pavia, 1st February, 2017.
163. “A multiphase porous media model for transport oncophysics”, Seminar, Department of Mechanical Engineering, Technical University Eindhoven, February 16, 2017.
164. “Transport oncophysics: drug delivery and tumor growth”, Seminar, Faculty of Mechanical Engineering, Technical University of Munich, March 13, 2017.
165. “Recent advances in tumor growth and drug delivery modeling”, Seminar, Ferrari Group Meeting, Houston Methodist Research Institute, Houston, April 12, 2017.
166. “A multiphase porous media model for tumor growth and drug delivery”, Keynote lecture, Interpore, 9th International Conference on Porous Media, Rotterdam, May 10, 2017.
167. “Ten years of ERC: a few thoughts”, Invited lecture, Conference as a part of preparation for National Congress of Science (Narodowy Konges Nauki), Lodz, Poland, May 25, 2017.
168. “A multiphase porous media model for transport oncophysics”, Keynote lecture, 4th South-East-European Conference on Computational Mechanics, Krajucevak, Serbia, July 3rd, 2017.
169. “Presentation of the University of Padua”, Seminar, University Duy Tan, Da Nang, Vietnam, July 31, 2017.
170. “ Research at the Department of Civil, Environmental and Architectural Engineering”, Seminar, University Duy Tan, Da Nang, Vietnam, July 31, 2017.
171. “Computational Transport Oncophysics”, plenary lecture, ACOME 2017, PhuQuoc Island, Vietnam, August 2, 2017.
172. “Fracturing in dry and saturated porous media” (with E. Milanese, D.T. Cao, and L. Simoni), plenary lecture, COMPLAS 2017, Barcelona, September 7, 2017.
173. “Transport oncophysics: delivery and efficiency evaluation of cancer drugs”, plenary lecture, 3rd Int. Conf. on Multiscale computational Methods in Solid and Fluids, September 22, 2017, Ljubljana, Slovenia.

174. “A multiphase porous media model for vascular tumor growth and drug delivery”, keynote lecture, 28th ALERT Workshop and School, Aussois, 2nd October, 2017.
175. “I programmi ERC: dalla fuga alla circolazione di cervelli, mission impossible?”, Seminar, workshop Nuove Collaborazioni tra l’Università di Udine e il CISM, Udine, October 12, 2017.
176. “Ingenieurwissenschaftliche Modelle und Simulationen für die Krebstherapie” Seminar, Innolunch, TÜV SÜD, Munich, October 25, 2017.
177. “An enhanced four or five phases model for tumor growth and drug delivery” Seminar, Ferrari Grants Meeting, Houston Methodist Research Institute, Houston, March 22, 2018.
178. “Modeling drug delivery and efficiency in the tumor microenvironment”, Internal Workshop of TUM-IAS Focal Period on Computational Modeling of Drug Delivery and Tumor Growth Prediction, Translatum, TUM, Munich, June 4, 2018.
179. “Dynamics of fracturing saturated porous media” General Lecture, ESMC 2018, Bologna, July 6, 2018.
180. “Some open problems in modelling tumor growth and interaction with the micro-environment”, Focal Period Workshop on Advanced Computational Modeling for Tumor Growth Prediction, TUM-IAS, Munich, September 24-26, 2018.
181. “A model for tumor growth and drug delivery”, Fellows’ lunch talk, IAS, Munich, October 8, 2018.
182. “Some open problems in modeling tumor growth and drug delivery”, Seminar, Department of Mechanical Engineering, Technical University Eindhoven, October 9, 2018.
183. “Tumor growth and drug delivery modeling within transport oncophysics” Invited Lecture, Shechtman-Suresh Honorary Symposium, Aristotle University of Thessaloniki, December 2, 2018.
184. “Indagini e modelli per la verifica sismica di edifici storici” (with C. Modena, E. Cescatti, F. Lorenzoni) Invited lecture, International Seminar CIAS, Dubai, March 15-23, 2019.
185. “Modeling drug delivery and efficiency in the tumor microenvironment”, lecture, MicroMotility 2019, Palazzo Franchetti, IVSLA, Venice, March 27, 2019.
186. “On coupling of tumor growth and transport of fluids through heterogeneous, whole tumors and their microenvironment” (with R. Santagiuliana, B. Wirthl, J. Kremheller, M. Milosevic, B. Milicevic, G. Sciumè, V. Simic, A. Ziemys, M. Kojic, K. Yokoi, W. Wall), lecture, Coupled 2019, VII Int. Conf. on Coupled Problems in Science and Engineering, Sitges, June 4, 2019.
187. “Recent advances in tumor growth modelling and drug delivery” lecture, MAECI Research Meeting, IIT, Genova, September 19, 2019.
188. “In favor of complexity in modeling” lecture, International Symposium on Geomechanics and Applications for Sustainable Development, Sustainable Industrial Processing Summit SIPS, Paphos,Cyprus, October 24, 2019
189. “Was man mit hochentwickelten Computerprogrammen alles l¨¨¨osen kann” Seminar, General Assembly, Ingenieurkammer der autonomen Provinz Südtirol, December 5, 2019.