Diane Guignard — CV

Assistant Professor, University of Ottawa, Department of Mathematics and Statistics
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Research interests

Numerical approximation of partial differential equations (PDEs), finite element methods, *a priori* and *a posteriori* error analysis, adaptive algorithms, uncertainty quantification, reduced order modeling, geometric PDEs

Education

Ecole Polytechnique Fédérale de Lausanne — **Lausanne, Switzerland**
PhD in Mathematics — *09/2012–11/2016*
Thesis advisers: Prof. F. Nobile and Prof. M. Picasso
Subject: *A posteriori* error estimation for PDEs with random input data

California Institute of Technology — **Pasadena, CA, USA**
Master thesis — *02/2012–07/2012*
Thesis advisers: Prof. T.Y. Hou (Caltech) and Prof. A. Quarteroni (EPFL)
Subject: Adaptive data analysis methods for nonlinear and nonstationary data

Ecole Polytechnique Fédérale de Lausanne — **Lausanne, Switzerland**
Master of Science in Applied Mathematics — *09/2010–07/2012*

Ecole Polytechnique Fédérale de Lausanne — **Lausanne, Switzerland**
Bachelor of Science in Mathematics — *09/2006–07/2010*

Grants

2. NSERC Discovery Grant. Title: *Linear and nonlinear reduced models for the numerical approximation of high-dimensional functions*. Evaluation group: 1508 - Mathematics and Statistics. CAD 115,000 (CAD 23,000 per year), 2021-2026

1. NSERC Discovery Grant - Launch Supplement. Title: *Linear and nonlinear reduced models for the numerical approximation of high-dimensional functions*. Evaluation group: 1508 - Mathematics and Statistics. CAD 12,500, 2021-2022

Awards

2019: Travel Award to attend the 2nd Annual Meeting of SIAM Texas-Louisiana Section
2018: Travel Award to attend the 13th World Congress on Computational Mechanics
2017: Postdoc fellowship awarded by the Swiss National Science Foundation (1.5 years)
2017: ECCOMAS award for the two best PhD theses of 2016 in Europe on Computational Methods in Applied Sciences and Engineering
2017: Award for the best PhD thesis of 2016 in Switzerland on Computational Methods in Applied Sciences and Engineering (Swiss nomination to the ECCOMAS Award)
2016: Nomination for the best EPFL PhD thesis in mathematics

2016: Special premium as a reward for services of exceptional value for teaching

2012: Prize for the poster of my master thesis carried out at Caltech

Publications

Submitted journal article

1. A. Bonito, D. Guignard, and A. Morvant. *Finite Element Methods for the Stretching and Bending of Thin Structures with Folding*.

Book chapters

2. A. Bonito and D. Guignard. *Approximating partial differential equations without boundary conditions*. In: R. DeVore and A. Kunoth (eds) Multiscale, Nonlinear and Adaptive Approximation, Springer (to appear)

1. D. Guignard and O. Mula. *Tree-Based Nonlinear Reduced Modeling*. In: R. DeVore and A. Kunoth (eds) Multiscale, Nonlinear and Adaptive Approximation, Springer (to appear)

Published journal articles

13. D. Guignard and P. Jantsch. *Nonlinear approximation of high-dimensional anisotropic analytic functions*. Journal of Approximation Theory, 300:106040, 2024

12. A. Bonito, D. Guignard, and W. Lei. *Numerical Approximation of Gaussian random fields on Closed Surfaces*. To appear in Computational Methods in Applied Mathematics, 2024 (available online)

11. A. Bonito, D. Guignard, and A. Morvant. *Numerical approximations of thin structure deformations*. Comptes Rendus. Mécanique, 351(S1):181-217, 2023

10. A. Bonito, D. Guignard, R.H. Nochetto, and S. Yang. *Numerical analysis of the LDG method for large deformations of prestrained plates*. IMA Journal of Numerical Analysis, 43(2):627-662, 2023

9. A. Bonito, D. Guignard, R.H. Nochetto, and S. Yang. *LDG approximation of large deformations of prestrained plates*. Journal of Computational Physics, 448:110719, 2022

8. A. Bonito, V. Girault, D. Guignard, K.R. Rajagopal, and E. Süli. *Finite Element Approximation of Steady Flows of Colloidal Solutions*. ESAIM: Mathematical Modelling and Numerical Analysis, 55(5):1963-2011, 2021

7. A. Bonito, A. Cohen, R. DeVore, D. Guignard, P. Jantsch, and G. Petrova. *Nonlinear methods for model reduction*. ESAIM: Mathematical Modelling and Numerical Analysis, 55(2):507-531, 2021

6. A. Bonito, R. DeVore, D. Guignard, P. Jantsch, and G. Petrova. *Polynomial Approximation of Anisotropic Analytic Functions of Several Variables*. Constructive Approximation, 53:319-348, 2021

5. A. Bonito, D. Guignard, and A.R. Zhang. *Reduced basis approximations of the solutions to spectral fractional diffusion problems*. Journal of Numerical Mathematics, 28(3):147-160, 2020

4. D. Guignard. *Partial Differential Equations with Random Input Data: A Perturbation Approach*. Archives of Computational Methods in Engineering, 26:1313-1377, 2019

3. D. Guignard and F. Nobile. *A Posteriori Error Estimation for the Stochastic Collocation Finite Element Method*. SIAM Journal on Numerical Analysis, 56(5):3121-3143, 2018

2. D. Guignard, F. Nobile and M. Picasso. *A posteriori error estimation for the steady Navier-Stokes equations in random domains*. Computer Methods in Applied Mechanics and Engineering, 313:483-511, 2017

1. D. Guignard, F. Nobile and M. Picasso. *A posteriori error estimation for elliptic partial differential equations with small uncertainties*. Numerical Methods for Partial Differential Equations, 32(1):175-212, 2016

Conference proceeding

1. S. Maad, K. Kergrene, J. Vacher, D. Guignard, S. Prudhomme, and A. Rassineux. *An Optimal Transport Based hr-Adaptive Mesh Pursuit*. 16ème Colloque National en Calcul de Structures, CNRS, CSMA, ENS Paris-Saclay, CentraleSupélec, Giens, France, May 2024

Theses

2. D. Guignard. *A posteriori error estimation for partial differential equations with random input data*. PhD Thesis N°7260, Ecole Polytechnique Fédérale de Lausanne, 2016

1. D. Guignard. *Adaptive data analysis methods for nonlinear and nonstationary data*. Master Thesis, California Institute of Technology, California, USA, 2012

Software

1. A. Bonito and D. Guignard. *Deal.ii tutorial step 82: Solving the fourth-order biharmonic equation using a lifting operator approach.* DOI: 10.5281/zenodo.5598180, 2021

Contributor: Sparse Grid toolkit (https://sites.google.com/view/sparse-grids-kit); The deal.ii Finite Element Library (https://www.dealii.org)

Professional Experience

Vocational

University of Ottawa — **Ottawa, ON, Canada**
Assistant Professor — *07/2020–*

Texas A&M University — **College Station, TX, USA**
Visiting Assistant Professor — *01/2019–06/2020*
Scientific mentor: Prof. Andrea Bonito

Texas A&M University — **College Station, TX, USA**
Research scholar — *10/2017–03/2019*
Scientific mentor: Prof. Andrea Bonito

Ecole Polytechnique Fédérale de Lausanne — **Lausanne, Switzerland**
Part-time postdoc — *01/2017–09/2017*

Manufacture Horlogère Vallée de Joux — **Le Sentier, Switzerland**
Internship in a watch company — *09/2011–02/2012*
Subjects: i) Metrology ii) Parametrization and optimization of an escapement

Research invitation

Texas A&M University — **College Station, TX, USA**
Visit to Prof. Andrea Bonito (1 week) — *11/2021–11/2021*
Goal: analyze an accelerated algorithm for simulating the large deformation of plates

Erwin Schrödinger International Institute **Vienna, Austria**
Participant in the program Computational Uncertainty Quantification: *06/2020–06/2020*
Mathematical Foundations, Methodology & Data (Postponed to 2022)

University of Maryland **College Park, Maryland, USA**
Visit to Prof. Ricardo H. Nochetto (1.5 and 2 weeks) *05/2018 and 03/2019*
Goal: collaborate and initiate a research project on large deformation of prestrain plates

Isaac Newton Institute for Mathematical Sciences **Cambridge, UK**
Participant in the program Uncertainty quantification for complex systems *04/2018–05/2018*

Polytechnique Montréal **Montréal, Québec, Canada**
Visit to Prof. Serge Prudhomme (2 weeks) *02/2017–02/2017*
Goal: collaborate and initiate a research project on goal-oriented error estimation

Basque Center for Applied Mathematics **Bilbao, Spain**
Visit to Vincent Darrigrand with Prof. Serge Prudhomme (1 week) *08/2017–08/2017*
Goal: study various types of error representation for goal-oriented error estimation

Teaching activities

University of Ottawa **Ottawa, ON, Canada**
Instructor *07/2020–*

- MAT 5131 - Ordinary Differential Equations I (Fall 2024): 14 students
- MAT 3741 - Algèbre linéaire appliquée (Winter 2023, Winter 2024): resp. 33 and 49 students
- MAT 3341 - Applied Linear Algebra (Winter 2023, Winter 2024): resp. 93 and 77 students
- MAT 2384 - Ordinary Differential Equations and Numerical Methods (Fall 2022): 81 students
- MAT 3380 - Introduction to Numerical Methods (Winter 2022, Winter 2024): resp. 8 and 35 students
- MAT 3530 - Introduction aux systèmes dynamiques (Fall 2020, Fall 2021): resp. 9 and 8 students
- MAT 3130 - Introduction to Dynamical Systems (Fall 2020): 15 students

Texas A&M University **College Station, TX, USA**
Instructor *01/2019–05/2020*

- MATH 417 - Numerical Methods (Spring 2020): 35 students
- MATH 308 - Differential Equations (Fall 2019): 2 sections of 54 students each
- MATH 304 - Linear Algebra (Spring 2019): 45 students

Ecole Polytechnique Fédérale de Lausanne **Lausanne, Switzerland**
Substitute Teacher *05/2017–06/2017*
Course: Numerical Analysis for mechanical engineering students (152 students)

Ecole Polytechnique Fédérale de Lausanne **Lausanne, Switzerland**
Teaching Assistant for bachelor and master level courses: *09/2012–11/2016*

- Numerical Approximation of PDE's II (4 semesters): main and only assistant, redaction of the exercices and solutions
- Numerical Analysis for engineers (2 semesters): main assistant, redaction of the exercices and solutions, redaction and organisation of the exams, supervision of the other TAs
- Analysis I for life sciences students (1 semester)
- Analysis I for physicists (1 semester)

Mentoring

Current students

- Rafael Martin (Undergraduate Research Project - MAT 4900), fall 2024, co-supervised with Y. Bourgault
  Subject: *Équations différentielles avec discontinuités: théorie, implémentation et analyse de sensibilité*
- Abdelkhalek Baroudi (PhD), since May 2024, co-supervised with E. Lorin
  Subject: *Numerical analysis of neural networks for (parametric) partial differential equations*
- Mohamed Barakat (PhD), since September 2023
  Subject: *Linear and nonlinear reduced order models for parametric/random PDEs*
- Anne Marie Conway (MSc), since September 2023
  Subject: *Adaptive algorithms for goal-oriented error estimation*

Former students (University of Ottawa)

- Rafael Martin (NSERC-USRA), summer 2024, co-supervised with Y. Bourgault (uOttawa)
  Subject: *Équations différentielles avec discontinuités: théorie, implémentation et analyse de sensibilité*
- Hilaire Epstein Nonhou Zogo (Undergraduate Research Project - MAT 4900), summer 2023
  Subject: *Adaptive solvers for ODEs*
- Anne Marie Conway (Undergraduate Research Project - MAT 4900), winter 2023
  Subject: *La méthode des élément finis*
- Patrick Cyr (Work-Study), fall 2022
  Subject: *Implementation of a solver for the unsteady Navier-Stokes equations using Julia*
- Katarina Spasojevic (Semester project), winter 2022
  Subject: *Adaptive finite element method for a partial differential equation with a varying coefficient*

Former students (Texas A&M University)

- Shelly Thompson (Undergraduate Summer Project), summer 2018, co-supervised with A. Bonito
  Subject: *Numerical approximations of parametric PDEs (Tayor polynomials)*
- Luis Trevino (Undergraduate Summer Project), summer 2018, co-supervised with A. Bonito
  Subject: *Numerical approximations of parametric PDEs (reduced basis)*
- Ashley Zhang (Graduate Summer Directed Study), summer 2018, co-supervised with A. Bonito
  Subject: *Comparison of polynomial and reduced basis approximations for parametric PDEs*

Service

Conferences, workshops, and seminars organization

- One of the main organizer (with A. Gerolin) of the *uOttawa Summer School 2024* of the Faculty of Science and instructor of the mini-course on *Reduced Order Models for Uncertainty Quantification* (6h), University of Ottawa, Ottawa, Ontario, Canada, August 12-23, 2024
- Leader of the project *Geometric Differential Equations* at the Undergraduate Summer School *Modeling and Simulation with PDEs*, Texas A&M University, College Station, Texas, USA, May 20-31, 2024
- Organizer of the Applied Math Seminars (Fall 2021, Winter 2022, Fall 2022, Winter 2023, Fall 2023, Winter 2024), University of Ottawa, Ottawa, Ontario, Canada
- Co-organizer (with S. Bartels and C. Melcher) of the mini-symposium *Interplay of Numerical and Analytical Methods in Nonlinear PDEs*, 10th International Congress on Industrial and Applied Mathematics (ICIAM 2023), Tokyo, Japan, August 20-26, 2023
- Co-organizer (with K. Kergrene and S. Prudhomme) of the mini-symposium *Applications of Goal-Oriented Error Estimation and Adaptivity*, 11th International Conference on Adaptive Modeling and Simulation (ADMOS 2023), Gothenburg, Sweden, June 19-21, 2023

- Co-organizer (with Y. Bourgault) of the mini-symposium *Numerical Methods for Partial Differential Equations*, CMS Summer meeting, Ottawa, Ontario, Canada, June 2-5, 2023
- Co-organizer (with K. Kergrene and S. Prudhomme) of the mini-symposium *Error Estimation and Adaptive Methods in CFD*, 22nd IACM Computational Fluids Conference (CFC2023), Cannes, France, April 25-28, 2023
- Co-organizer (with I.-G. Farcas and M. Tezzele) of the mini-symposium *Accelerating Computational Science and Engineering via Data-Driven Learning and Nonlinear Model Reduction*, SIAM Conference of Computational Science and Engineering (CSE23), RAI Congress Center, Amsterdam, The Netherlands, February 26-March 3, 2023
- Co-organizer (with B. Kaltenbacher and W. Rundell) of the workshop *Inverse Problems for Anomalous Diffusion Processes* (22w5043), Banff International Research Station (BIRS), Banff, Alberta, Canada, May 8-13, 2022
- Co-organizer (with A. Bonito) of the mini-symposium *Recent advances in the numerical approximation of geometric partial differential equations*, SIAM Texas-Louisiana Section, Texas A&M University, College Station, Texas, USA, October 16-18, 2020
- Co-organizer (with P. Jantsch) of the mini-symposium *Recent advances in high-dimensional approximation*, SIAM Texas-Louisiana Section, Southern Methodist University, Dallas, USA, November 1-3, 2019

University of Ottawa

- Judge for the poster competition of the Undergraduate Science Research Opportunity Program (USRO) program, April 11, 2024
- Open house: Discussion panel in French (Winter 2022, Winter 2023, Winter 2024), Meet and Greet (Fall 2022), Information session in French (Fall 2023)
- Member of the hiring committee for a position in Applied Dynamical Systems, Fall 2023
- Judge for the Three-Minute Thesis competition of the Ottawa Mathematics and Statistics Conference (OMSC), May 24, 2023
- Presentation at the Math Horizons Day (for grade 11 students), May 5, 2023 and April 26, 2024. *Les mathématiques dans la vie de tous les jours: traitement d'images*
- Presentation at the Math Club (for undergraduate students), March 17, 2022. *Introduction to the adaptive finite element method*

Thesis committees

- University of Ottawa: 2 PhD students, 1 MSc student, 2 MSc-to-PhD transfer, 1 PhD-to-MSc transfer
- Carelton University: 2 MSc

Journal refereeing

Advances in Computational Mathematics, Calcolo, Journal of Numerical Mathematics, Mathematics of Computation, Methods and Algorithms for Scientific Computing, Numerische Mathematik, SIAM Journal on Numerical Analysis, SIAM Journal on Scientific Computing

Institutional responsibilities

Ecole Polytechnique Fédérale de Lausanne **Lausanne, Switzerland**
Committee member *12/2015–12/2015*
User committee for the project to extend the virtualization of the classrooms
Goal: identify virtual desktops needs for the EPFL courses

Conferences, workshops, and seminars

Presentations

Aug 2024 (Invited talk in minisymposium) International Conference on Free Boundary Problems, João Pessoa, Brazil, August 27, 2024

Jul 2024 (Invited talk in minisymposium) 16th World Congress in Computational Mechanics (WCCM), Vancouver, British Columbia, Canada, July 23, 2024

Jul 2024 (Invited talk) Workshop on Multivariate approximation, discretization, and sampling recovery, Isaac Newton Institute for Mathematical Sciences, Cambridge, UK, July 15, 2024

May 2024 (Invited talk in minisymposium) SIAM Conference on Materials Science (MS24), Pittsburgh, Pennsylvania, USA, May 21, 2024

Dec 2023 (Seminar talk) Numerical Analysis Seminar at EPFL, Lausanne, Switzerland, December 20, 2023

Dec 2023 (Invited talk in minisymposium) CMS Winter meeting, Montréal, Québec, Canada, December 2, 2023

Nov 2023 (Colloquium talk) Department of Mathematics & Statistics, McMaster University, Hamilton, Ontario, Canada, November 24, 2023

Oct 2023 (Seminar talk) Numerical Analysis and Scientific Computing Seminar, Waterloo University, Waterloo, Ontario, Canada, October 17, 2023

Aug 2023 (Invited talk in minisymposium) 10th International Congress on Industrial and Applied Mathematics (ICIAM 2023), Tokyo, Japan, August 21, 2023

May 2023 (Invited talk) Frontiers of Numerical PDEs - conference in honor of Professor Ricardo H. Nochetto's 70th birhtday, University of Maryland, College Park, Maryland, USA, May 18, 2023

Feb 2023 (Seminar talk) PDE and Applied Math Seminar, Drexel University, Philadelphia, Pennsylvenia, USA, February 24, 2023

Dec 2022 (Invited talk in minisymposium) CMS Winter meeting, Toronto, Ontario, Canada, December 3, 2022

Sep 2022 (Plenary talk) Swiss Numerics Day, Zürich, Switzerland, September 12, 2022

Aug 2022 (Talk in minisymposium) 15th World Congress in Computational Mechanics (WCCM), Virtual (originally scheduled at Yokohama, Japan), August 4, 2022

May 2022 (Invited talk in minisymposium) 2022 SIAM Annual Meeting, Pittsburgh, Pennsylvania, USA, July 12, 2022

Jun 2022 (Invited talk in minisymposium) Reliable Methods of Mathematical Modeling (RMMM), Lausanne, Switzerland, June 23, 2022

May 2022 (New Prof Lecture) Faculty of Science, University of Ottawa, Ottawa, Ontario, Canada, May 3, 2022

Mar 2022 (Invited talk) Math Club, University of Ottawa, Ottawa, Ontario, Canada, March 17, 2022

Dec 2021 (Invited talk) Workshop on Controlling Error and Efficiency of Numerical Models: Methods, benchmarks, and case studies, University of Ottawa (online), Ottawa, Ontario, Canada, December 3, 2021

Nov 2021 (Invited talk in minisymposium) SIAM Texas-Louisiana Section, University of Texas Rio Grande Valley, South Padre Island, Texas, USA, November 7, 2021

Sept 2021 (Seminar talk) CRM Applied Math Seminar, McGill University, Montréal, Québec, Canada, September 20, 2021

Sept 2021 (Seminar talk) Modeling and Computation Seminar, University of Arizona, Tucson, Arizona, USA, September 16, 2021

Mar 2021 (Invited talk in minisymposium) SIAM Conference on Computational Science and Engineering (CSE21), Virtual Conference, Originally scheduled in Forth Worth, Texas, USA, March 1, 2021

Dec 2020 (Seminar talk) Oberseminar: Angewandte Mathematik, Albert-Ludwigs-University Freiburg, Freiburg im Breisgau, Germany, December 15, 2020

Nov 2020 (Seminar talk) Applied Mathematics Seminar, Baylor University, Waco, Texas, USA, November 16, 2020

Nov 2020 (Colloquium talk) CAAM Virtual Colloquium Series at Rice University, Houston, Texas, USA, November 9, 2020

Jul 2020 (Invited talk in minisymposium) WCCM-ECCOMAS Congress, Paris, France, July 19-24, 2020 (Postponed to 2021)

Jun 2020 (Invited talk) Workshop on Approximation of high-dimensional parametric PDEs in forward UQ, ESI, Vienna, Austria, June 2-5, 2020 (Postponed to 2022)

Feb 2020 (Invited talk) Workshop Mathematics of Reduced Order Models, ICERM, Providence, Rhode Island, USA, February 17, 2020

Nov 2019 (Talk in minisymposium) SIAM Texas-Louisiana Section, Southern Methodist University, Dallas, Texas, USA, November 3, 2019

Jul 2019 (Seminar talk) Numerical Analysis Seminar at EPFL, Lausanne, Switzerland, July 23, 2019

Jul 2019 (Invited talk in minisymposium) 9th International Congress on Industrial and Applied Mathematics (ICIAM), Valencia, Spain, July 18, 2019

Mar 2019 (Seminar talk) Numerical Analysis Seminar at UMD, College Park, Maryland, USA, March 25, 2019

Mar 2019 (Talk) Finite Element Rodeo, The University of Texas at Austin, Austin, Texas, USA, March 1, 2019

Oct 2018 (Invited talk) 2018 TTU Red Raider Minisymposium, Texas Tech University, Lubbock, Texas, USA, October 27, 2018

Oct 2018 (Seminar talk) CLASS Seminar (Department of Nuclear Engineering) at Texas A&M University, Texas, College Station, USA, October 19, 2018

Jul 2018 (Talk) 13th World Congress in Computational Mechanics (WCCM), New York City, New York, USA, July 23, 2018

Feb 2018 (Talk) Finite Element Rodeo, Louisiana State University, Baton Rouge, Louisiana, USA, February 24, 2018

Nov 2017 (Seminar talk) Numerical Analysis Seminar at Texas A&M University, College Station, Texas, USA, November 8, 2017

Sep 2017 (Plenary talk) ECCOMAS Young Investigators Conference, Milan, Italy, September 15, 2017

Jun 2017 (Talk in minisymposium) International Conference on Adaptive Modeling and Simulation (ADMOS), Verbania, Italy, June 26, 2017

Feb 2017 (Seminar talk) Internal Seminar at Polytechnique Montréal, Montréal, Canada, February 13, 2017

Oct 2016 (Contributed talk) Workshop on Sparse Grids and Applications, Miami, Florida, USA, October 4, 2016

Jun 2016 (Contributed talk) MATHICSE Retreat, Leysin, Switzerland, June 28, 2016

Jun 2106 (Talk in minisymposium) European Community on Computational Methods in Applied Sciences (ECCOMAS), Crète, Greece, June 10, 2016

Apr 2016 (Talk) Colloque Numérique Suisse, Fribourg, Switzerland, April 22, 2016

Apr 2016 (Contributed talk) SIAM Conference on Uncertainty Quantification, Lausanne, Switzerland, April 8, 2016

Jun 2015 (Talk in minisymposium) Reliable Methods of Mathematical Modeling (RMMM), Zürich, Switzerland, June 30, 2015

Jun 2105 (Contributed talk) International Conference on Adaptive Modeling and Simulation (ADMOS), Nantes, France, June 9, 2015

Jun 2014 (Contributed talk) MATHICSE Retreat, Leysin, Switzerland, June 12, 2014

Poster

Apr 2015 Swiss Numerical Day 2015, Geneva, Switzerland, April 17, 2015

Attendance

May 2022 Workshop on Nonlinear Bending, Albert-Ludwigs-Universität Freiburg, Freiburg im Brisgau, Germany, May 23-25, 2022

May 2022 Workshop on Inverse Problems for Anomalous Diffusion Processes (22w5043), Banff International Research Station (BIRS), Banff, Alberta, Canada, May 8-13, 2022

May 2022 Workshop on Approximation of high-dimensional parametric PDEs in forward UQ, Erwin Schrödinger International Institute for Mathematical Physics, Vienna, Austria, May 9-13, 2022 (virtual attendance)

Jul 2021 SIAM Annual Meeting (AN21), Virtual Conference, July 19-23, 2021

Jul 2020 Joint SIAM/CAIMS Annual Meeting (AN20), Virtual Conference, Originally scheduled in Toronto, Ontario, Canada, July 6-17, 2020

Apr 2017 Swiss Numerical Analysis Day, Basel Switzerland, April 28, 2017

Dec 2013 International Workshop on Uncertainty Quantification in Fluids Simulation (BOQUSE), Talence, France, December 16-18, 2013

Aug 2013 The European Conference on Numerical Mathematics and Advanced Applications (ENUMATH), Lausanne, Switzerland, August 26-30, 2013

Professional memberships

- Society for Industrial and Applied Mathematics (SIAM), since 2017.
- Canadian Association for Computational Science and Engineering (CACSE), since 2021
- Centre de Recherches Mathématiques (CRM) – Applied Mathematics Laboratory, since 2022
- Canadian Association for Applied and Industrial Mathematics (CAIMS), since 2022