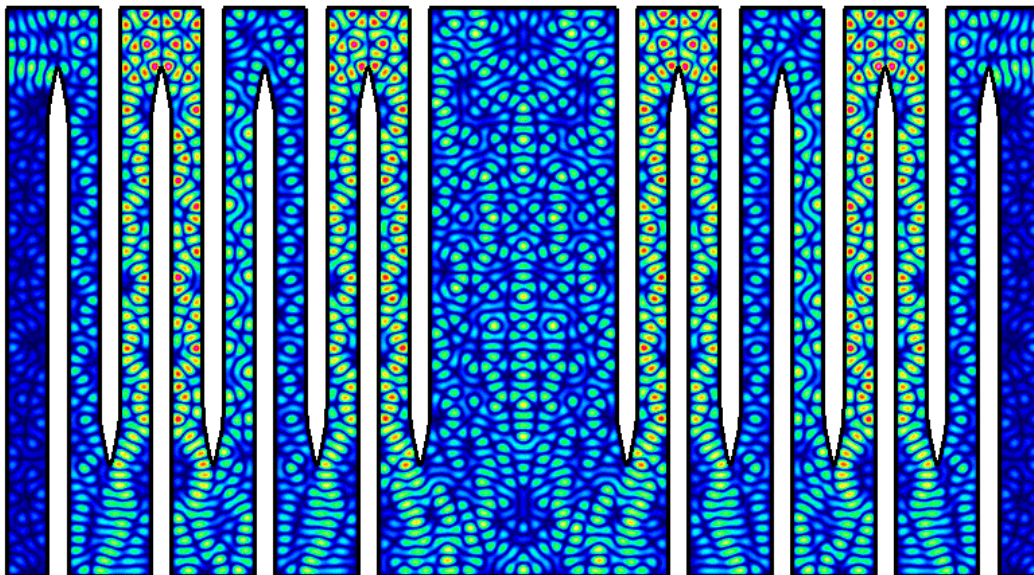


Waves 2026 - Program

The 17th International Conference on Mathematical and Numerical Aspects of Wave Propagation

John Molson school of business Concordia University in Montreal

Canada, June 22-26 2026



Monday - Tuesday

Registration open (08:00-)

Monday

Welcome · 08:30-09:00

Plenary: Guillaume Bal

09:00-10:00 MB-1.210 · Session Chair: Chrysoula Tsogka

Coffee 10:00-10:30

Block A · 10:30–12:30

MB-1.210 — Boundary Element Methods & Integral Equations #1 Session - Chair: Marc Bonnet

Time	Title	Authors
10:30	Efficient evaluation of the two-layered acoustic Green's function	Stefan A. Sauter , Laura Depedrini, Benedikt Grässle, J. Markus Melenk
11:00	Fast high-order solvers for the Lippmann-Schwinger equation in piecewise-smooth heterogeneous media	Thomas G. Anderson , Juan Burbano-Gallegos, Luiz M. Faria, Carlos Pérez-Arancibia
11:30	A fast direct solver based on FEM-BEM coupling for time-harmonic electromagnetic scattering	Johann Bourhis , Emanuele Arcese, Francis Collino
12:00	Truncated kernel windowed Fourier projection: a fast algorithm for the 3D free-space wave equation	Nour G. Al Hassanieh , Alex H. Barnett, Leslie Greengard

MB-9.A — Helmholtz #1 Session - Chair: Joseph Coyle

Time	Title	Authors
10:30	Convergence of the WaveHoltz iteration on \mathbb{R}^d	Elliot Backman , Olof Runborg
11:00	Effective models for Helmholtz's equation in a corner with a thin layer	Cédric Baudet , Sonia Fliss, Patrick Joly
11:30	The largest ever Helmholtz simulations in inhomogeneous media	Max Cubillos , Edwin Jimenez
12:00	Nonlinear acoustic inverse problem with cross-correlation data for passive imaging	Jean Dutheil , Florian Faucher

MB-9.B – Acoustic Wave Propagation & Scattering #1 Session - Chair: Christophe Hazard

Time	Title	Authors
10:30	Time dependent acoustic scattering from penetrable objects with nonlinearities	Paschalis Angelidis , Alexander Rieder
11:00	Analysis of the geometric spectral properties of electromagnetic waveguides	Philippe Briet, Maxence Cassier , Thomas Ourmières-Bonafos, Michele Zaccaron
11:30	Rendering disordered waveguides transparent to waves	Matthieu Davy , Isam Ben Soltane, Daniel Lenz, Stefan Rotter
12:00	Spectral properties of a kinetic equation coupled with the linear wave system	Bruno Després

MB-9.C – Inverse Problems & Imaging #1 - Session Chair: Daniel Appelo

Time	Title	Authors
10:30	Recovery of acoustic properties in the Westervelt equation using high-frequency large-amplitude waves	Sebastian Acosta , Benjamin Palacios
11:00	A neural operator framework for solving inverse scattering problems	Victor Chenu , Housseem Haddar, Hadrien Montanelli
11:30	A deep learning approach for optical cloaking device design	Elsie Cortes , Camille Carvalho, Symeon Papadimitropoulos, Chrysoula Tsogka
12:00	A Factorization Method Approach to the Biharmonic Transmission Problem in Absorbing Media	General Ozochiawaeze , Rafael Ceja Ayala, Isaac Harris

MB-9.D – Absorbing Boundary Conditions #1 - Session Chair: Maryna Kachanovska

Time	Title	Authors
10:30	Revisiting Artificial Boundary Conditions Through Modal Expansion	Hélène Barucq , Florian Faucher, Olivier Lafitte, Ha Pham
11:00	Transparent boundary conditions in heterogeneous electromagnetic waveguides	Anne-Sophie Bonnet-Ben Dhia , Lucas Chesnel, Sonia Fliss, Eric Lunéville, Aurélien Parigaux
11:30	Domain Truncation for Quasilinear Wave Equations	Thomas Hagstrom
12:00	Finite element discretizations of hyperboloidal compactification layers for unbounded time-domain wave problems	Markus Wess , Anil Zenginoğlu

Lunch 12:30-14:00

Plenary: Christophe Hazard

14:00-15:00 MB-1.210 · Session Chair: Anne-Sophie Bonnet-Ben Dhia

Coffee 15:00-15:30

Block B · 15:30–17:30

MB-1.210 – Elastic Waves & Elastodynamics #1 - Session Chair: Stephanie Chaillat

Time	Title	Authors
15:30	A Robust Model Order Reduction Method to Accelerate Full Waveform Inversion via Fréchet Derivatives	Julien Besset , Hélène Barucq, Victor Martins Gomes
16:00	Green tensor for strain gradient elastodynamics	Marc Bonnet
16:30	Reconstruction of the Shear Modulus in Nearly Incompressible Media via Adaptive Spectral Inversion	Naghm Chibli , Martin Genet, Sébastien Imperiale
17:00	Spectral properties of waves in high-contrast media	Yuri A. Godin, Leonid Koralov, Boris Vainberg

MB-9.A – Electromagnetic Waves & Maxwell Equations #1 - Session Chair: Carlos Perez-Arancibia

Time	Title	Authors
15:30	Optimization of EM-Chiral Scatterers	Tilo Arens , Marvin Knöller, Raphael Schurr
16:00	Domain derivative based shape reconstruction for time-dependent Maxwell's equations	Marvin Knöller
16:30	Towards fast conservative methods for the numerical resolution of Maxwell's equations in multipatch domains	Ángel Pita-da-Veiga , Jerónimo Rodríguez, Rafael Vázquez
17:00	The Hermite-Taylor Discrete Correction Function Method for Surface-Driven Electromagnetic Problems	Yann-Meing Law

MB-9.B – Helioseismology & Astrophysics Session Chair: Raphael Terrine

Time	Title	Authors
15:30	Reconstructing inertial-mode flows from the correlation function of acoustic modes	Hélène Barucq, Florian Faucher, Damien Fournier , Laurent Gizon, Zhi-Chao Liang, Ha Pham
16:00	Uniqueness results in time-harmonic passive imaging with applications to helioseismology	Thorsten Hohage , Björn Müller
16:30	Asymptotic Solutions to the Radial Wave Equation in Kerr Spacetime	John Levis , Thomas Hagstrom
17:00	Stability of a passive inverse parameter problem with applications to helioseismology	Björn Müller , Thorsten Hohage

MB-9.C – Nonlinear Waves, Solitons & Dynamical Systems - Session Chair: Behrooz Yousefzadeh

Time	Title	Authors
15:30	Localized Time-Periodic Patterns in a 1D Lattice	Jason J. Bramburger , Eric Berglund, Björn Sandstede
16:00	Bistability of travelling waves and mesa states in a mass-conserved reaction-diffusion system	Jack M. Hughes , Saar O. Modai, Leah Edelstein-Keshet, Arik Yochelis
16:30	Leafnet algorithm for N-dimensional nonlinear hyperbolic systems	Emmanuel Lorin , Arian Novruzi
17:00	Exploring Explicit Formulas and Multi-solitons for Integrable Systems	Ruoci Sun

MB-9.D – Water Waves & Wave-Structure Interaction #1 - Session Chair: Olivier Lafitte

Time	Title	Authors
15:30	Continuous and discrete stability of dispersive perturbation of hyperbolic initial boundary value problems	Geoffrey Beck , Nicolas Crouseilles, Ludovic Martaud
16:00	The return to the equilibrium of a floating cylinder in the Boussinesq regime	Geoffrey Beck, Ewan Contentin , Ludovic Martaud
16:30	A Theory for Three-Dimensional Wave Breaking Based on Crest Instability of Short-Crested Stokes Waves	Frédéric Dias , Ayoub Mansar, Matt Turner, Tom Bridges
17:00	Wave-Based Stability Analysis of Couette and Gravity-Driven Bilayer Film Flows	M. Al Ahmadi Hammou , M. Scholle, P. H. Gaskell

Tuesday

Plenary: Barbara Romanowicz

09:00-10:00 MB-1.210 · Session Chair: Serge Prudhomme

Coffee 10:00-10:30

Block A · 10:30–12:30

MB-1.210 – Helmholtz #2 - Session Chair: Thomas Anderson

Time	Title	Authors
10:30	A Helmholtz Solver for Open Domains with Complex Geometry using WaveHoltz and Overset Grids	Jeffrey Banks, William Henshaw, Ngan Le , Donald Schwendeman
11:00	A Trefftz Continuous Galerkin method for Helmholtz problems	Nicola Galante , Bruno Després, Emile Parolin
11:30	High-order frequency derivatives of Helmholtz BIE solutions: fast computation and applications	Hiroshi Isakari
12:00	Accelerating WaveHoltz with Deflation	Daniel Appelo , William Henshaw

MB-9.A – Boundary Element Methods & Integral Equations #2 - Session Chair: Stefan Sauter

Time	Title	Authors
10:30	Efficient 3D elastodynamic multiple scattering using the Method of Reflections	Stéphanie Chaillat , Marion Darbas
11:00	Fast Singular-Kernel Convolution on General Non-Smooth Domains via Truncated Fourier Filtering	Jinghao Cao , Oscar Bruno
11:30	Convergence analysis for Numerical Steepest Descent contour deformation methods	Thomas Caussade , David P. Hewett
12:00	Space-time BEM based coupling strategies for the analysis of infrastructures solicited by seismic waves	Giulia Di Credico , Alessandra Aimi, Heiko Gimperlein, Chiara Guardasoni, Francesco Freddi, Roberto Valentino

MB-9.B – Acoustic Wave Propagation & Scattering #2 - Session Chair: Frederic Dias

Time	Title	Authors
10:30	Scattering problems in junctions of stratified media	Sarah Al Humaikani, Anne-Sophie Bonnet-Ben Dhia, Sonia Fliss
11:00	Spectral analysis of a closed perturbed waveguide filled with a hyperbolic medium	Maryna Kachanovska, Dylan Machado
11:30	Exceptional Points and Defective Resonances in a Sound-Soft Scattering Problem	Kei Matsushima
12:00	Flow Rate Measurement in a Heterogeneous Fluid with Acoustic Waves	Alexander McSweeney-Davis , Lorenzo Audibert, Housseem Haddar

MB-9.C – Inverse Problems & Imaging #2 - Session Chair: Max Cubillos

Time	Title	Authors
10:30	Explicit inverse scattering for the one-dimensional Schrödinger equation	Peter Gibson
11:00	On the role of regularisation parameters in Adaptive Eigenspace Inversion	Marie Graff , Nasrin Nikbakht, Melissa Tacy
11:30	The Inverse Elasto-Acoustic Problem	Patrick Grice , Yassine Boubendir, Zoi-Heleni Michalopoulou
12:00	Adapting Full-Waveform Inversion for Subsurface CO ₂ Sequestration	Alison Malcolm , Vahid Entezaar-Saadat, Xingda Jiang, Abolfazl Khan Mohammadi, Colin Farquharson

MB-9.D – Absorbing Boundary Conditions #2 - Session chair: Thorsten Hohage

Time	Title	Authors
10:30	Transparent boundary conditions for the stellar oscillation equations without Cowling approximation	Janosch Preuss , Hélène Barucq, Florian Faucher, Ha Pham, Sébastien Tordeux
11:00	Interfacial Radiation Boundary Conditions for Topologically Protected Edge Modes	Mason McCallum , Thomas Hagstrom
11:30	Complex scaling for the homogeneous wave equation with scaling direction non-normal to the transparent boundary	Lothar Nannen , Constantin Pierer, Markus Wess
12:00	A potential theory on weighted graphs	Fernando Guevara Vasquez , Trent DeGiovanni

Lunch 12:30-14:00

Plenary: Isaac Harris

14:00-15:00 MB-1.210 · Session Chair: Behrooz Yousefzadeh

Coffee 15:00-15:30

Tue · Block B · 15:30–17:30

MB-1.210 – Elastic Waves & Elastodynamics #2 - Session Chair: Barbara Romanowicz

Time	Title	Authors
15:30	Comparison of numerical coupling strategies in time-harmonic elasto-acoustic simulations	Pierre Dubois , H��l��ne Barucq, Florian Faucher, Isabelle Rami��re, Rapha��l Prat
16:00	A well-posed effective strain-gradient model for elastic waves in arbitrary periodic media	Nicolas Auffray , Marc Bonnet, R��mi Cornaggia, Giuseppe Rosi
16:30	Mathematical models for wave propagation phenomena generated by landslides	Juliette Dubois, Natacha Guegan-Fau, S��bastien Imperiale , Anne Mangeney, Jacques Sainte-Marie
17:00	High-order Simulation of Elasto-Acoustic Wave Propagation Using Hybrid Nonconforming Methods (HHO)	Romain Mottier , Alexandre Ern, Laurent Guillot

MB-9.A – Electromagnetic Waves & Maxwell Equations #2 - Session Chair: Tilo Arens

Time	Title	Authors
15:30	A Stochastic Boundary Element Method for Electromagnetic Scattering in Random Media	Titouan Marquaille , Thomas Bonnafont, Arnaud Coatanhay
16:00	A Discontinuous Petrov–Galerkin Framework for Time-Harmonic Maxwell Equations in Microwave-Heated Flows	Oreste Marquis , Bruno Blais, Matthias Maier
16:30	Computational spectral geometry for the Maxwell cavity problem	Nilima Nigam , Kewen Bu, Jayda Grant, Rodrigo Stehling
17:00	A Hermite-Taylor Compact Discrete Correction Function Method for Maxwell's Equations	Seth Malonson , Yann-Meing Law, Jean-Christophe Nave

MB-9.C – Stochastic Propagation - Session Chair: Emmanuel Lorin

Time	Title	Authors
15:30	Effective attenuation and Gaussian statistics of the speckle for the paraxial wave equation	Christophe Gomez , Olivier Pinaud
16:00	Multiscale analysis of wave propagation in the branched flow regime	Josselin Garnier, Natacha Guegan-Fau , Sébastien Imperiale
16:30	Optical wave reconstruction in highly turbulent random media	Kevin Luna , Max Cubillos
17:00	Destabilization of traveling waves in a nonlinear lattice with nonreciprocal coupling	Andrus Giraldo, Stefan Ruschel, Behrooz Yousefzadeh

MB-9.B – Periodic Media, Metamaterials & Homogenization #1 - Session Chair: Olof Runborg

Time	Title	Authors
15:30	Diffraction by a rough thin layer on an arbitrary shaped object: the periodic and random cases	Pierre Boulogne , Sonia Fliss, Laure Giovangigli, Justine Labat
16:00	High-order stochastic homogenization of the Helmholtz transmission problem	Laure Giovangigli
16:30	Wave propagation and gaps in three-dimensional periodic media	Yuri Godin , Boris Vainberg
17:00	On the surface Bloch waves in truncated periodic media	Bojan B Guzina , Shixu Meng, Prasanna Salasiya, Long Nguyen

MB-9.D – Time-Domain Methods & A Posteriori Estimation #1 - Session Chair: Marcus Grote

Time	Title	Authors
15:30	A note on the discrete Unmapped Tent Pitching for the heterogeneous wave equation	Marcella Bonazzoli , Gabriele Ciaramella, Ilario Mazzieri
16:00	Decoupling Wave-Heat-Type Problems	Julian Dörner , Benjamin Dörich
16:30	Mixed Precision Implicit Runge–Kutta and Explicit Two-Derivative Runge–Kutta Methods	Sigal Gottlieb , Zachary J. Grant, César Herrera
17:00	Recovery-Based Error Indicator for Finite Difference Methods	Ferhat Sindy , Annalisa Buffa, Marco Picasso

Reception - 17:30-20:30

Wednesday

Social day

Thursday

Plenary: Andrea Moiola

09:00-10:00 MB-1.210 · Session Chair Lise-Marie Imbert-Gerard

Coffee 10:00-10:30

Thu · Block A · 10:30–12:30

MB-1.210 – Helmholtz #3 - Session Chair: Sonia Fliss

Time	Title	Authors
10:30	The hp-FEM Does Not Suffer from the Pollution Effect When Applied to the Helmholtz Equation with Piecewise Gevrey Coefficients	Jeffrey Galkowski, Mostafa Meliani , Euan Spence
11:00	High-order Wavelet Galerkin Methods for Scattering Problems	Michelle Michelle , Bin Han
11:30	A HDG method with transmission variables for time-harmonic wave propagation problems	Simone Pescuma , Gwénaél Gabard, Théophile Chaumont-Frelet, Axel Modave
12:00	Scalable WaveHoltz in MFEM	Amit Rotem , Daniel Appelö, Will Pazner

MB-9.A – Boundary Element Methods & Integral Equations #3 - Session Chair: Johannes Tausch

Time	Title	Authors
10:30	A posteriori estimates and adaptive boundary elements for the wave equation	Heiko Gimperlein
11:00	Towards kernel-free boundary integral methods for variable coefficients	Benedikt Gräßle , Stefan A. Sauter
11:30	Geometry-conforming Galerkin methods for the Lippmann-Schwinger equation on fractal domains	David P. Hewett , Joshua Bannister, Andrew Gibbs
12:00	An Unconditionally Stable Energetic Galerkin Scheme for Acoustic Penetrable Objects Using Time-Domain Surface Integral Equations	Junze Shao , Rui Chen, Hakan Bagci

MB-9.B – Acoustic Wave Propagation & Scattering #3 - Session Chair: Lothar Nannen

Time	Title	Authors
10:30	Imaging in two-dimensional waveguides with complex geometry	Gregory Mwamba , Chrysoula Tsogka, Symeon Papadimitropoulos
11:00	The cut-off resolvent can grow arbitrarily fast in obstacle scattering	Siavash Sadeghi , Simon N. Chandler-Wilde
11:30	Application of the multivariate Loewner Framework to the modelling of acoustic propagation in rigid-frame porous materials	Lucie Schwoebel , Charles Poussot-Vassal, Denis Matignon, Rémi Roncen, Estelle Piot, Pierre Vuillemin
12:00	Optimization-based transionospheric SAR autofocus with screen projection precursor	Mikhail Gilman, Semyon Tsynkov

MB-9.C – Inverse Problems & Imaging #3 - Session Chair: Isaac Harris

Time	Title	Authors
10:30	Transmission eigenvalues for biharmonic plate scattering: existence, discreteness, far-field recovery, and numerical computation	Andreas Kleefeld , Isaac Harris, Heejin Lee
11:00	Characterizing the Imaging Indicator of the Linear Sampling Method for the Inverse Medium Scattering Problem	Lorenzo Audibert, Shixu Meng
11:30	Spectrally characterizing subsurface targets with GPR-SAR	Arnold D. Kim, Symeon Papadimitropoulos, Joseph Simpson , Chrysoula Tsogka
12:00	Identifying defective units in infinite periodic arrays of point sources	Dinh-Liem Nguyen , Nhung H. Nguyen, Thi-Phong Nguyen

MB-9.D – Trefftz & Plane Wave Methods - Session Chair: Bruno Despres

Time	Title	Authors
10:30	A Model Reduction Approach for Wave Phenomena using dG-Trefftz Methods	Tobias Born , Karsten Urban
11:00	Preconditioning for the DG plane wave method	Joseph Coyle , Nilima Nigam
11:30	Polynomial quasi-Trefftz spaces for scalar linear equations	Lise-Marie Imbert-Gérard
12:00	Quasi-Trefftz spaces for time-harmonic Maxwell's equations	Ilaria Fontana , Lise-Marie Imbert-Gérard

Lunch 12:30-14:00

Plenary: Lilia Krivodonova

14:00 – 15:00 MB-1.210 · Session Chair: Tom Hagstrom

Coffee 15:00-15:30

Thu · Block B · 15:30 – 17:30

MB-1.210 – Periodic Media, Metamaterials & Homogenization #2 - Session Chair: Sebastien

Imperiale

Time	Title	Authors
15:30	Analysis of Wave Propagation in Time-Dependent Media	Patrick Joly , Marie Touboul
16:00	Homogenization of wave equations and dispersive profiles for ring solutions	Ben Schweizer , Grégoire Allaire, Agnes Lamacz
16:30	Radiation Boundary Conditions with Rational Function Approximations	Steve Li , Thomas Hagstrom
17:00	Error Estimation for a Homogenized Model of a Space-Time Modulated Metamaterial	Jean-Francois Mercier , Marie Touboul

MB-9.A – Time-Domain Methods & A Posteriori Estimation #2 - Session Chair: Shixu Meng

Time	Title	Authors
15:30	Adaptive FEM with explicit time integration for the wave equation	Marcus J. Grote , Omar Lakkis, Carina S. Santos
16:00	High-order contour-integral methods for strongly continuous semigroups	Andrew Horning , Adam R. Gerlach
16:30	Reliable and locally space-time efficient a posteriori estimates for the transient wave equation	Nicolas Hugot , Alexandre Imperiale, Martin Vohralík
17:00	A parallel space-time p-adaptive discontinuous Galerkin method for nonlinear acoustics	Pascal Lehner , Christian Wieners, Danielle Corallo

MB-9.B – Water Waves & Wave-Structure Interaction #2 - Session Chair: Helene Barucq

Time	Title	Authors
15:30	Waves and transport in a circular water wave resonator: experiments and simulations	Uwe Harlander , Franz-Theo Schön, Ion D. Borcia, Rodica Borcia, Seymen Ilke Kaykanat, Michael Bestehorn
16:00	Propagation of the heave in a harbor: geometrical optics approach	Olivier Lafitte , Emmanuel Audusse, Catherine Sulem
16:30	Interactions between water waves and floating structures, a numerical method	Geoffrey Beck, Alan Riquier
17:00	Viscoelastic gravity wave force on a circular cylinder in open channel	Boyuan Yu , Vincent H. Chu

MB-9.C – Helmholtz / Trefftz / BEM Solver Extensions - Session Chair: Andrea Moiola

Time	Title	Authors
15:30	Infinity as a finite boundary for Helmholtz equations	Anil Zenginoğlu , Markus Wess
16:00	Quasi-Trefftz Discontinuous Galerkin Method for the Convected Helmholtz Equation with Smooth Coefficients	Andréa Lagardère , Lise-Marie Imbert-Gerard, Guillaume Sylvand, Sébastien Tordeux
16:30	Variational Quasi-Trefftz Method for Time-Harmonic First-Order Wave Propagation Systems	Matthias Rivet, Sébastien Pernet, Sébastien Tordeux
17:00	Fast 3D Time Domain Boundary Element Approach for Elastodynamics based on Multivariate Adaptive Cross Approximation	Vibudha Lakshmi Keshava, Martin Schanz

MB-9.D – Electromagnetic Waves & Maxwell Equations #3 - Session Chair: Daniel Appelo

Time	Title	Authors
15:30	Broken-FEEC on multipatch domains with local refinements	Frederik Schnack , Martin Campos Pinto
16:00	Topological solutions and accelerated waves in electromagnetic theory	Radmila Sazdanovic, Paul Spears, Semyon Tsynkov
16:30	Energy-preserving simulation of electromagnetic waves at oblique incidence using Split-Field FETD method	Valentin Wasquel , Paula Aguilera, Michel Fournié, Denis Matignon
17:00	Derivation of polarization dependent interface conditions for Maxwell's equations	David Wiedemann , Ben Schweizer, Bérangère Delourme

Conference Banquet 18:30 -

Friday

Plenary: Leonardo Zepeda-Núñez

09:00-10:00 MB-1.210 · Session Chair: Daniel Appelo

Coffee 10:00-10:30

Fri · Block A · 10:30 – 12:30

MB-1.210 – Integral / DD / ABC - Session Chair: Nilima Nigam

Time	Title	Authors
10:30	Quadrature for Space-Time Galerkin BEM of the Wave Equation	Johannes Tausch
11:00	Transcranial Ultrasound Simulations using Volume-Surface Integral Equations	Elwin van 't Wout , Alberto Almuna-Morales, Danilo Aballay, Ignacio Labarca-Figueroa, Pierre Gélât, Reza Haqshenas
11:30	Optimized Schwarz methods in time for discrete transport control	Duc Quang Bui, Bérangère Delourme, Laurence Halpern, Felix Kwok
12:00	A Multi-domain/Multi-method Preconditioner for the Electric Field Integral Equation	Timothée Galtier , David Levadoux

MB-9.A – Boundary Element Methods & Integral Equations #4 - Session Chair: David Hewitt

Time	Title	Authors
10:30	Maxwell à la Helmholtz: Frequency-Robust Direct Boundary Integral Equations for 3D PEC Scattering	Carlos Pérez-Arancibia , Catalin Turc
11:00	Fast assembly of H-matrix and FMM-based boundary operators for time-harmonic Maxwell equations	Clément Aumonier , David Levadoux
11:30	High-order Nyström method for scattering by penetrable inhomogeneous media with discontinuous refractive index	Ambuj Pandey , Krishna Yamanappa Poojara
12:00	Model reduction for a wave propagation problem in a slotted structure	Augustin Leclerc , Pierre Benjamin, Luc Giraud, Sofiane Haddad, Paul Mycek, Guillaume Sylvand, Isabelle Terrasse

MB-9.B – Acoustic Wave Propagation & Scattering #4 - Session Chair: Lilia Krivodonova

Time	Title	Authors
10:30	Passivity enforcing multipole based method for time domain modelling of acoustic wave propagation in rigid frame porous media	Lucie Schwoebel , Denis Matignon, Remi Roncen, Estelle Piot
11:00	Quantitative ultrasound imaging in layered media	Josselin Garnier, Laure Giovangigli, Pierre Millien, Sofia Suarez Casabiell
11:30	Addressing Seismic Acquisition Repeatability in CO ₂ Storage Monitoring Using Machine Learning	Manon Sarrouilhe , Mauricio Araya-Polo, H�el�ene Barucq, Henri Calandra, Stefano Frambati
12:00	Towards a Scale-Bridging Time Discretization Scheme for the Acoustic Wave Equation	Dustin M�uhlh�user , Roland Maier

MB-9.C – Inverse Problems & Imaging #4 - Session Chair: Andreas Kleefeld

Time	Title	Authors
10:30	Some approaches for the field extrapolation in the context of inverse magnetisation problem	Dmitry Ponomarev
11:00	A tsunami inverse problem in the time domain: numerical analysis of an optimal control approach	Laurent Bourgeois, Philippe Moireau, Rapha�el Terrine
11:30	Inversion-free binary segmentation for computed tomography and inverse scattering	Jacob D. Rezac , Zachary J. Grey, Newell H. Moser, Jason P. Killgore
12:00	Direct reconstruction for acoustic inverse Born scattering	Lisa Sch�atzle , Nuutti Hyv�onen

MB-9.D – Elastic Waves & Elastodynamics #3 - Session Chair: Semyon Tsynkov

Time	Title	Authors
10:30	Boundary determination in anisotropic elasticity	Joonas Ilmavirta, Mikko Salo, Hj�ordis Schl�uter , Daniel Windisch
11:00	Seismic Reflection of Three-Dimensional Plane Waves in Functionally Graded Triclinic Media with Interfacial Imperfections	Akanksha Srivastava , Federico J Sabina
11:30	An inverse problem for estimating effective parameters in asymptotic elastodynamics with non-periodic roughness	Rodrigo Zelada , Alexandre Imperiale, Philippe Moireau
12:00	Exponential and harmonic regimes of anti-plane shear wave in a piezoelectric thin layer over half-space	Anna Zemlyanova , Gennadi Mikhasev, Arindam Nath, Jia Fei

Lunch 12:30-14:00

Fri · Block B · 14:00 – 16:00

MB-9.A – Domain Decomposition & Preconditioning - Session Chair: Lise-Marie Imbert-Gerard

Time	Title	Authors
14:00	Substructured Optimized Schwarz Domain Decomposition Solver on Multiple GPUs for Helmholtz Problems	R. Greffe , A. Chabib, A. Modave, C. Geuzaine
14:30	Domain Decomposition for Elastic Waves in Spatial Networks	Joseph Holten , Moritz Hauck
15:00	A Flux-Based Domain Decomposition Method for Time-Harmonic Wave Problems	Nawfel Benatia , Christophe Geuzaine

MB-9.B – Full Waveform Inversion & Geophysical Applications - Session Chair: Allison Malcolm

Time	Title	Authors
14:00	Full Waveform Inversion Using Second Order Optimizers and Domain Decomposition with Spectral Coarse Space	Boris Martin , Christophe Geuzaine
14:30	An efficient numerical solver for non-periodic scattering problems in locally perturbed periodic structures	Nasim Shafieeabyaneh , Tilo Arens, Ruming Zhang

MB-9.C – Plasma & Mathematical Foundations - Session Chair: Yann-Meing Law

Time	Title	Authors
14:00	Finite Element Formulation with Integral Dielectric Kernel for ICRH Plasma Heating on Non-Field-Aligned Meshes	Jules Zaleski , Bernard Reman, Philippe Lamalle, Christophe Geuzaine
14:30	Geometry-dependent well-posedness and finite elements for shear Alfvén waves	M. Renoldner , A. Buffa, T. Miehl, M. Picasso
15:00	A discontinuous Galerkin approach for the radiative transfer approximation of high-frequency vibrational energy flow on curved surfaces	Robert J. Lockett , David J. Chappell
15:30	Analysis and Simulation of 2D Maxwell's equations in Cold Plasma	Manaswinee Bezbaruah¹ , Patrick Ciarlet, Maryna Kachanovska

MB-9.D – Time Integration & Nonlinear Waves - Session Chair: Tom Hagstrom

Time	Title	Authors
14:00	A Posteriori Estimates for Space Discretizations of the Wave Equation with Dynamic Meshes	Théophile Chaumont-Frelet, Sumit Mahajan , Martin Vohralík
14:30	Preserving multiple conserved quantities for the Korteweg-de Vries equation	Andy T.S. Wan, Tareq Uz Zaman
15:00	Nonlinear Acoustic Model Equations resulting from Non-Relativistic and Relativistic Lagrangian Pairing	Markus Scholle , Philip H. Gaskell, Meriem Al Ahmadi Hammou
15:30	A tsunami inverse problem in the time domain: numerical analysis of an optimal control approach	Laurent Bourgeois, Philippe Moireau , Raphaël Terrine