



HONOM 2019

VII EUROPEAN
WORKSHOP ON HIGH
ORDER NUMERICAL
METHODS FOR
EVOLUTIONARY PDES:
THEORY AND APPLICATIONS

April 1-5, 2019. Madrid, Spain



Venue: E.T.S.I. Minas y Energía
Universidad Politécnica de Madrid

<http://eventos.upm.es/go/honom2019>



POLITÉCNICA



ESCUELA TÉCNICA SUPERIOR
DE INGENIEROS DE MINAS Y ENERGÍA



CONFERENCE PROGRAMME



SFB-TRR 75
Tropfendynamische Prozesse unter
extremen Umgebungsbedingungen

SimTech
Cluster of Excellence



ExaHyPE
An Exascale Hyperbolic PDE Engine



University of
Zurich^{UZH}

I-Math Institute of Mathematics

Background

This is the VII edition of HONOM conference. The previous ones were held in Trento (2007, 2009, 2011, 2015), Bordeaux (2013) and Stuttgart (2017). Mathematical modeling, based on Partial Differential Equations (PDEs) and numerical simulation are fundamental tools in the context of problems arising in engineering, physics, biology or medicine among many others, from the point of view of computational efficiency and accuracy of the results obtained. In the field of CFD, finite volume and discontinuous Galerkin methods are commonly used. In order to achieve high order of accuracy in space, high order reconstruction methods were firstly introduced in the 80s, namely Essentially Non Oscillatory (ENO) schemes. Later on Weighted ENO (WENO) techniques and Central WENO (CWENO) methods were developed. Total Variation Diminishing (TVD) schemes allow to obtain well-established second order schemes. However, this TVD property is also used in Runge-Kutta schemes to get higher order of accuracy, such as the third order RK-TVD scheme which is widely used. More recently ADER approach, in the context of Riemann problems, was introduced which allows to obtain arbitrary order of accuracy. A step forward in ADER schemes are the so called Local Space-Time DG which allow to apply ADER method to problems with stiff source terms.

Venue

The conference will take place in Madrid (Spain) at Escuela Técnica Superior de Ingenieros de Minas y Energía (Universidad Politécnica de Madrid).

Madrid is the capital of Spain and a very cosmopolitan place, where modern infrastructures coexist with a large historical and cultural heritage. The modern part of the city includes Gran Via, which was built at the beginning of XX century, Paseo de la Castellana crossing the city from North to South, the business zone of Nuevos Ministerios and Azca or the Four Towers Business Area. Concerning the historical part it stands out the zone called Madrid de los Austrias, which dates back to 16th century. There are many cultural and historical attractions such as Prado Museum, Reina Sofia Art Center, Caixa Forum Madrid, Museo Thyssen-Bornemisza, The Royal Palace, the Almudena Cathedral or Plaza Mayor.



Organizing Committee

Eleuterio F. Toro, University of Trento, Italy.
Remi Abgral, University of Zurich, Switzerland.
Michael Dumbser, University of Trento, Italy.
Claus-Dieter Munz, University of Stuttgart, Germany.

Local Organizing Committee

Arturo Hidalgo (Chairman).
Carlos Conde.
Francisco Javier Elorza.
Alfredo López.
José Luis Parra.
Lourdes Tello.

Invited speakers

Jan Hesthaven	École Polytechnique Fédérale de Lausanne, Switzerland.
Raphael Loubère	Université de Bordeaux, France.
Pep Mulet	Universitat de Valencia, Spain.
Ilya Peshkov	Paul Sabatier University, Toulouse III, France.
Gabriella Puppo	Università degli Studi dell'Insubria, Italy
Vladimir Titarev	Federal Research Center Computer Science and Control, Russia.
Svetlana Tokareva	Los Alamos National Laboratory, USA.
Maria Elena Vázquez-Cendón	Universidade de Santiago de Compostela, Spain.
Helen Yee	NASA Ames Research Center, USA.

Address

- The address of the event is:

Escuela Técnica Superior de Ingenieros de Minas y Energía.

Ríos Rosas, 21. 28003 Madrid.

- The talks will take place in:

Room 1 (Auditorium).

Room 2 (Fausto Elhuyar Room).

Conference WiFi

There is a WiFi access available for all the participants in the conference.

Name of the network: **InvitadosUPM**

Username: **HONOM2019**

Password: **h7phe1r6**

Social Activities

Tuesday, 2. Guided Visit to the Mine-Museum Marcelo Jorissen

This is an artificial mine that dates back to 1963 and was created by a former Director of the School of Mines, Marcelo Jorissen, for students' practice. Although it is not a real mine, all the elements inside come from real ones. Since the 80's it is no longer used for students' practice but it is just an attraction.

Wednesday, 3. Guided Visit to Museo del Prado (Prado Museum)

On Wednesday 3rd there will be a guided visit to Prado Museum (Museo del Prado). This is one of the most important painting museum in the world. All the participants in the conference may attend the visit that will take place in reduced groups with an official guide. The tours will take place in English. This visit is included in the Conference fees. There will be a bus outside the main entrance of the building to pick up the participants interested in this visit. At the end of it the bus will take the participants back to the University.

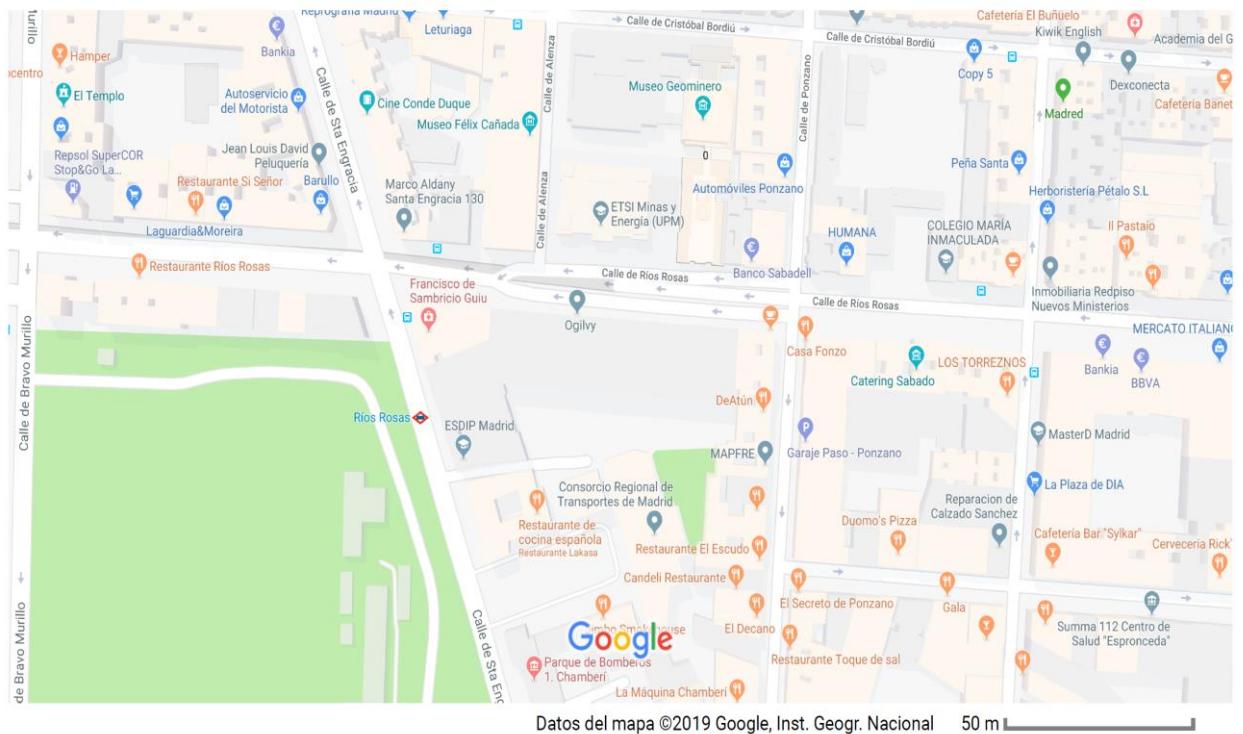
Thursday, 4. Conference Dinner.

The Conference Dinner will take place in the main building of Escuela Técnica Superior de Ingenieros de Minas y Energía.

Lunch and dinner opportunities

It is possible to have lunch at the bar of the conference venue (ETSI Minas y Energía). The price for participants in HONOM conference is 5.50€.

There are also several places around the conference place, restaurants and tapas bars, to have lunch or dinner.



Many of them are in the streets: Ríos Rosas, Santa Engracia and Ponzano.

Schedule HONOM 2019

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00-9:30	Registration	R. Loubière	E. Vázquez-Cendón	J. Hesthaven	S. Tokareva
9:30-10:00	WELCOME & Intro.				
10:00-10:30	P. Mulet	C. Parés	M. Dumbser	J. Nordström	G. Gassner
10:30-11:00		Coffee break	Coffee break	Coffee break	Coffee break
11:00-11:30	Coffee break	D. Kapitina	E.F. Toro	F. Hindenlang	G. Bertaglia
11:30-12:00	M.J. Castro	M. Ioratti	H. Temimi	L. Saavedra	P. Bacigaluppi
12:00-12:30	S. Chiocchetti	Yujie Zhu	A. Kikker	S. Busto	F. Kummer
12:30-13:00	E. Ferrer	M. Tavelli	Hugo Carrillo	L.M. Versbach	P. Chandra
13:00-14:30	Lunch break	Lunch break	Lunch break	Lunch break	CLOSING
14:30-15:00	I. Peshkov	G. Puppo	H. Yee	V. Titarev	
15:00-15:30	A. Ershova	D. Torlo	M. Geisenhofer	F.C. Massa	V. Perrier
15:30-16:00				Coffee break	A. Baeza
16:00-16:30	Coffee break	Coffee break		Coffee break	
16:30-17:00	K.A. Schneider	Tan Bui	I. Gómez-Bueno	M. Eimer	A.I. Muñoz
17:00-17:30	E. Lé Mélio	W. Boscheri	J. Manzanero	A.M.Rueda (1)	S. Jöns
17:30-18:00	Group discussion		Group discussion	Guided visit to Prado Museum	Zhenguo Yan
18:00-18:30					V. Llorente
18:30-19:00	Reception		Visit to the mine-museum		P. Lafon
19:00-19:30				Group discussion	P. Balkhalov
					V. Singh
					Conference dinner
					21:00

Program

Monday 01/04/2019

10:00-11:00 Room 1	<i>Implicit-explicit schemes for degenerate diffusion-convection PDE.</i> <u>P. Mulet.</u>
11:30-12:00 Room 1	<i>A high order discontinuous Galerkin scheme for a hyperbolic relaxation system for dispersive non-hydrostatic water waves.</i> C. Escalante, M. Dumbser and <u>M.J. Castro</u> .
12:00-12:30 Room 1	<i>High order ADER schemes for a first order hyperbolic formulation of compressible flow with surface tension.</i> <u>S. Chiocchetti</u> , M. Dumbser, S. Gavrilyuk and I. Peshkov.
12:00-12:30 Room 2	<i>A L2-norm regularized incremental-stencil WENO scheme for compressible flows.</i> <u>Y. Zhu</u> and X. Hu.
12:30-13:00 Room 1	<i>Implicit large eddy simulations for airfoils using compressible and incompressible discontinuous Galerkin solvers.</i> <u>E. Ferrer</u> , J. Manzanero, A.M. Rueda-Ramírez, G. Rubio and E. Valero.
14:30-15:30 Room 1	<i>The need for structure preserving methods in continuum physics.</i> <u>I. Peshkov</u> , D. Dumbser and E. Romenski.
15:30-16:00 Room 1	<i>The HLLEM scheme in three-dimensional multicomponent gas dynamics code using arbitrary equation of state.</i> <u>A. V. Ershova</u> , N. A. Mikhailov and I. V. Glazyrin.
15:30-16:00 Room 2	<i>High order deferred correction residual distribution schemes for stiff relaxation problems with implicit treatment.</i> <u>D. Torlo</u> and R. Abgrall.
16:30-17:00 Room 1	<i>On a class of two-dimensional incomplete Riemann solvers.</i> <u>K.S. Schneider</u> and M.J. Castro.
16:30-17:00 Room 2	<i>An Upwind Hybridized Discontinuous Galerkin Framework: Theory, Algorithms and Applications.</i> <u>T. Bui</u> .

17:00-17:30 Room 1	<i>A class of polytopial $H(\text{div})$ -- conformal elements and their approximation spaces.</i> <u>R. Abgrall, E. Le Mélédo and P. Öffner.</u>
17:00-17:30 Room 2	<i>Central WENO subcell finite volume limiters for ADER discontinuous Galerkin schemes on fixed and moving unstructured meshes.</i> <u>W. Boscheri, M. Semplice and M. Dumbser.</u>

Tuesday 02/04/2019

9:00-10:00 Room 1	<i>A posteriori cures of inherent numerical issues generated by high accurate schemes.</i> <u>R. Loubère.</u>
10:00-10:30 Room 1	<i>Compact Approximate Taylor methods for systems of conservation laws.</i> <u>H. Carrillo and C. Parés.</u>
11:00-11:30 Room 1	<i>A Field-Guided Method for Quadrilateral Mesh Generation: Using High Order Methods to Generate Grids for High Order Methods.</i> <u>D. Kopriva, J. Marcon, J. Peiro and S. Sherwin.</u>
11:30-12:00 Room 1	<i>A posteriori sub-cell finite volume limiting of staggered semi-implicit discontinuous Galerkin schemes for the Euler equations of gasdynamics.</i> <u>M. Ioratti, M. Dumbser and R. Loubère.</u>
11:30-12:00 Room 2	<i>Space-time discontinuous Galerkin method for the one-dimensional wave equation.</i> <u>H. Temimi, and M. Baccouch.</u>
12:00-12:30 Room 1	<i>A high-order local Discontinuous Galerkin solver for viscoelastic flow: new ways to solve the confined cylinder benchmark problem.</i> <u>A. Kikker and F. Kummer.</u>
12:00-12:30 Room 2	<i>An entropy stable high order DGSEM for the Baer-Nunziato model.</i> <u>F. Coquel, C. Marmignon, P. Rai, and F. Renac.</u>

12:30-13:00 Room 1	<i>High order numerical schemes for linear and non-linear elasticity.</i> <u>M. Tavelli</u> and M. Dumbser.
12:30-13:00 Room 2	<i>An order-adaptive compact approximation Taylor method for systems of conservation laws.</i> <u>H. Carrillo</u> , C. Parés, E. Macca, G. Russo and D. Zorío.
14:30-15:30 Room 1	<i>High order well balanced methods for gas dynamics with gravity.</i> <u>G. Puppo</u> .
15:30-16:00 Room 1	<i>A Discontinuous Galerkin immersed boundary solver for compressible flow: From time efficient shock-capturing to shock-fitting.</i> <u>M. Geisenhofer</u> , F. Kummer and B. Müller.
15:30-16:00 Room 2	<i>Density positivity and mass conservation for an implicit high-order discontinuous Galerkin method applied to variable density incompressible flows.</i> <u>F. Massa</u> , F. Bassi, L. Botti and A. Colombo.
16:30-17:00 Room 1	<i>A Static Condensation Algorithm for Time-Implicit discretizations of Gauss-Lobatto Discontinuous Galerkin Spectral Element Methods.</i> <u>A. M. Rueda-Ramírez</u> , D.A. Kopriva, E. Ferrer, G. Rubio and E. Valero.
16:30-17:00 Room 2	<i>Local time stepping scheme for district heating networks.</i> <u>M. Eimer</u> , Raul Borsche and Norbert Siedow.
17:00-17:30 Room 1	<i>A free-energy stable nodal discontinuous Galerkin approximation with summation-by-parts property for the Cahn-Hilliard equation.</i> <u>J. Manzanero</u> , Gonzalo Rubio, David A. Kopriva, Esteban Ferrer, and Eusebio Valero.
17:00-17:30 Room 2	<i>High-order well-balanced methods for systems of balance laws: a control-based approach.</i> <u>I. Gómez Bueno</u> , and C. Parés.

Wednesday 03/04/2019

9:00-10:00 Room 1	<i>Well-balanced finite volume segregated schemes for hyperbolic non linear systems with source terms</i> <u>E. Vázquez-Cendón.</u>
10:00-10:30 Room 1	<i>A structure-preserving staggered semi-implicit scheme for continuum mechanics.</i> <u>M. Dumbser</u> , W. Boscheri, M. Ioriatti, I. Peshkov and E. Romenski.
11:00-11:30 Room 1	<i>Simplified ADER schemes based on a time-reconstruction solver for the generalised Riemann problem.</i> <u>E.F. Toro.</u>
11:30-12:00 Room 1	<i>High-order invariant domain preserving ALE approximation of hyperbolic systems.</i> J.-L. Guermond, B. Popov and <u>L. Saavedra.</u>
11:30-12:00 Room 2	<i>On the low Mach number limit of the Active Flux scheme.</i> <u>W. Barsukow</u> , J. Hohm, C. Klingenberg and P.L. Roe.
12:00-12:30 Room 1	<i>High order semi-implicit discontinuous Galerkin methods for natural convection problems.</i> <u>S. Busto</u> , M. Tavelli, W. Boscheri and M. Dumbser.
12:00-12:30 Room 2	<i>High-Order Methods on Summation by Parts Form for the Magnetic Induction Equation.</i> <u>H. Ranocha</u> , K. Ostaszewski, P. Heinisch.
12:30-13:00 Room 1	<i>High order path-conservative ADER discontinuous Galerkin schemes for the GRMHD equations.</i> <u>F. Fambri</u> , M. Dumbser, O. Zanotti, L. Rezzolla and S. Köppel.
12:30-13:00 Room 2	<i>A high-order discontinuous Galerkin solver for multiphase flows.</i> J. Manzanero, C. Redondo, <u>G. Rubio</u> , E. Ferrer, E. Valero, S. Gómez-Álvarez and Á. Rivero.

14:30-15:30 *Two Decades Old Entropy Stable Methods for the Euler Equations Revisited.*
Room 1 H. Yee.

Thursday 04/04/2019

9:00-10:00 *Controlling oscillations in high-order accurate methods through neural networks.*
Room 1 J. Hesthaven.

10:00-10:30 *Stable and Accurate Filtering Procedures for High Order Summation-By-Parts Schemes.*
Room 1 J. Nordström and T. Lundquist.

11:00-11:30 *A new entropy conservative two-point flux for ideal MHD equations derived from first principles.*
Room 1 F. Hindenlang and G. Gassner.

11:30-12:00 *A reconstruction of the velocity vector in Godunov Euler schemes on three-dimensional unstructured mesh.*
Room 1 N. A. Mikhailov and I. V. Glazyrin.

11:30-12:00 *An Approach to Unsteady p -Adaptation Based on Truncation Error Estimations for HighOrder Discontinuous Galerkin Methods.*
Room 2 A. M. Rueda-Ramírez, G. Rubio, E. Ferrer and E. Valero.

12:00-12:30 *New Multigrid Preconditioners for DG Methods.*
Room 1 L. M. Versbach, P. Birken and G. Gassner.

12:00-12:30 *High-order Flux Reconstruction schemes with Implicit time-stepping for the Compressible Navier-Stokes equations.*
Room 2 P. Chandra, K. Puri and C. Hirsch.

12:30-13:00 *A conservative limiting method for bicomponent and finite-element schemes.*
Room 1 M. Bragin and B. Rogov.

12:30-13:00 *On Strong Stability of Explicit Runge-Kutta Methods for Nonlinear Problems.*
Room 2 H. Ranocha.

14:30-15:30 Room 1	<i>Numerical analysis of high-speed three-dimensional flows of rarefied gas on the basis of the Shakhov model.</i> <u>V.A. Titarev.</u>
15:30-16:00 Room 1	<i>Symmetrizable first order formulation of Navier-Stokes equations and numerical results with the discontinuous Galerkin method.</i> <u>V. Perrier.</u>
15:30-16:00 Room 2	<i>Efficient smoothness indicators for a class of WENO methods.</i> <u>A. Baeza</u> , R. Bürger, P. Mulet and D. Zorío.
16:30-17:00 Room 1	<i>Approximate Riemann Solution of the Generalized Riemann Problem for Advection Diffusion Equations.</i> <u>S. Jöns</u> and C.D. Munz.
16:30-17:00 Room 2	<i>A nonlocal nonconvex approach to saliency detection.</i> E. Alcaín, <u>A. I. Muñoz</u> , I. Ramírez and E. Schiavi.
17:00-17:30 Room 1	<i>Accelerating spectral/hp element DG simulations using implicit time integration methods.</i> <u>Zhen-Guo Yan</u> , Yu Pan, J. Peiro and S. Sherwin.
17:00-17:30 Room 2	<i>Towards a generalised limiter for nonlinear conservation laws through domain adaptation.</i> R. Abgrall and <u>M.H. Veiga</u> .
17:30-18:00 Room 1	<i>ENATE, a high-order scheme for convection-diffusion problems.</i> <u>V.J. Llorente</u> and A. Pascau.
17:30-18:00 Room 2	<i>Application of high-order numerical methods for modeling multicomponent and multiphase flows.</i> <u>P. Lafon</u> .
18:00-18:30 Room 1	<i>Error estimation of linear numerical schemes on periodic meshes for transport equation.</i> <u>P. Bakhalov</u> .

18:00-18:30 *Kinetic energy preserving split form flux reconstruction for the compressible Euler equations at Gauss nodes.*
Room 2 V. Singh and Steven Frankel.

Friday 05/04/2019

9:00-10:00 *Advances in High-order Residual Distribution Scheme for Fluid Dynamics and Lagrangian Hydrodynamics.*
Room 1 S. Tokareva, R. Abgrall, P. Bacigaluppi, K. Lipnikov and N. Morgan

10:00-10:30 *Subcell Adaptive Shock Capturing for Discontinuous Galerkin Methods.*
Room 1 Gregor Gassner, Johannes Markert and Stefanie Walch.

11:00-11:30 *Accuracy-preserving IMEX schemes applied to the augmented FSI system for blood flow in viscoelastic vessels.*
Room 1 G. Bertaglia, V. Caleffi and A. Valiani.

11:00-11:30 *Accuracy and Efficiency Comparison of Different Implicit Time Integration Schemes.*
Room 2 Yu Pan, Zhen-Guo Yan, J. Peiro and S. Sherwin.

11:30-12:00 *Current status on of High-order Residual Distribution Schemes for Non-linear Hyperbolic.*
Room 1 R. Abgrall, P. Bacigaluppi and S. Tokareva.

11:30-12:00 *Extended discontinuous Galerkin methods for the simulation of three-phase contact line problems.*
Room 2 F. Kummer and M. Smuda.

12:00-12:30 *Analysis of SAT-Techniques in the Finite-Element-Framework.*
Room 1 R. Abgrall, J. Nordström, P. Öffner, and S. Tokareva.

12:00-12:30 *A High Order ALE Discontinuous Galerkin Method for Solving Compressible Euler Equations.*
Room 2 Xijun Yu, Chaobao Huanga and Na An.

12:30-13:00 *ENATE, a high-order scheme for Cartesian grids with arbitrary expansion/contraction ratios.*
Room 1 A. Pascau.

List of Participants

BACIGALUPPI, Paola Universität Zürich - Switzerland	paola.bacigaluppi@math.uzh.ch
BAEZA, Antonio Universitat de Valencia - Spain	bamanan@uv.es
BAKHALOV, Pavel Keldish Institute of Applied Mathematics, RAS - Russia	bahvalo@mail.ru
BARSUKOW, Wasilij Universität Zürich - Switzerland	mail@sturzhang.de
BERTAGLIA, Giulia Università degli Studi di Ferrara - Italy	giulia.bertaglia@unife.it
BOSCHERI, Walter Università degli Studi di Ferrara - Italy	bscwtr@unife.it
BRAGIN, Michael Keldish Institute of Applied Mathematics, R AS - Russia	michael@bragin.cc
BUI, Tan The University of Texas at Austin - USA	tanbui@ices.utexas.edu
BUSTO-ULLOA, Saray Università degli Studi di Trento - Italy	saray.busto@usc.es
CARRILLO, Hugo Universidad de Málaga - Spain	hugo.carrillo@uma.es
CASTRO, Manuel J. Universidad de Málaga - Spain	mjcastro@uma.es
CHANDRA, Prabhat NUMECA International S.A. - Belgium	chandra.prabhat@numeca.be
CHIOCCHETTI, Simone Università degli Studi di Trento - Italy	simone.chiocchetti@unitn.it
CONDE LÁZARO, Carlos Universidad Politécnica de Madrid - Spain	carlos.conde@upm.es
DUMBSER, Michael University of Trento - Italy	michael.dumbser@unitn.it
EIMER, Matthias Fraunhofer ITWM - Germany	reise@itwm.fraunhofer.de
ELISEEVA, Maria Russian Federal Nuclear Center - Russia	mishytka8904@gmail.com

ELORZA TENREIRO, Francisco J.	Universidad Politécnica de Madrid - Spain	franciscojavier.elorza@upm.es
ERSHOVA, Arina	Russian Federal Nuclear Center - Russia	ershovaav@gmail.com
FAMBRI, Francesco	University of Trento - Italy	francesco.fambri@unitn.it
FERRER, Esteban	Universidad Politécnica de Madrid - Spain	esteban.ferrer@upm.es
GASSNER, Gregor	University of Cologne - Germany	ggassner@math.uni-koeln.de
GEISENHOFER, Markus	TU Darmstadt - Germany	geisenhofer@fdy.tu-darmstadt.de
GÓMEZ BUENO, Irene	Universidad de Málaga - Spain	igomezbueno@uma.es
HESTHAVEN, Jan	École Polytechnique Fédérale de Lausanne - Switzerland	Jan.Hesthaven@epfl.ch
HIDALGO, Arturo	Universidad Politécnica de Madrid - Spain	arturo.hidalgo@upm.es
HINDENLANG, Florian	Max-Planck Institute for Plasma Physics - Germany	florian.hindenlang@ipp.mpg.de
IORATTI, Matteo	Università degli Studi di Trento - Italy	matteo.ioriatti@unitn.it
JEZERCIC, Vinko	Imperial College London - UK	vj18@ic.ac.uk
JÖNS, Steven	Universität Stuttgart	steven.joens@iag.uni-stuttgart.de
KERKMANN, David	University of Düsseldorf - Germany	david.kerkmann@uni-duesseldorf.de
KIKKER, Anne	TU Darmstadt - Germany	kikker@fdy.tu-darmstadt.de
KOPRIVA, David	The Florida State University - USA	kopriva@math.fsu.edu
KUMMER, Florian	TU Darmstadt - Germany	kummer@fdy.tu-darmstadt.de
LAFON, Philippe	EDF R&D - France	philippe.lafon@edf.fr

LE MÉLÉDO, Elise Universität Zürich - Switzerland	elise.lemoledo@math.uzh.ch
LLORENTE LÁZARO, Víctor Javier Universidad de Zaragoza	victor.javier.llorente@gmail.com
LÓPEZ BENITO, Alfredo Universidad Politécnica de Madrid - Spain	alfredo.lopez@upm.es
LOUBÈRE, Raphaël Université de Bordeaux - France	raphael.loubere@u-bordeaux.fr
MACCA, Emanuele Università degli Studi di Palermo	emanuele.macca92@gmail.com
MANZANERO, Juan Universidad Politécnica de Madrid - Spain	juan.manzanero@upm.es
MASSA, Francesco Carlo Università degli Studi di Bergamo	francescocarlo.massa@unibg.it
MIKHAILOV, Nikita Russian Federal Nuclear Center - Russia	mikhailovnik@mail.ru
MULET, PEP Universitat de Valencia - Spain	Pep.Mulet@uv.es
MUNZ, Claus-Dieter Universität Stuttgart	munz@iag.uni-stuttgart.de
MUÑOZ, Ana Isabel Universidad Rey Juan Carlos - Spain	anaisabel.munoz@urjc.es
NORDSTRÖM, Jan Linköping University - Sweden	jan.nordstrom@liu.se
ÖFFNER, PHILIPP Universität Zürich - Switzerland	philipp.oeffner@math.uzh.ch
PARÉS, Carlos Universidad de Málaga - Spain	pares@uma.es
PASCAU, Antonio Universidad de Zaragoza - Spain	pascau@unizar.es
PAN, Yu Imperial College London - UK	yu.pan16@imperial.ac.uk
PARRA, José Luis Universidad Politécnica de Madrid - Spain	joseluis.parra@upm.es

PESHKOV, Ilya Paul Sabatier University - Toulouse III - France	peshenator@gmail.com
PUPPO, Gabriella Università degli Studi dell'Insubria	gabriella.puppo@uniroma1.it
PURI, KUNAL NUMECA International S.A. - Belgium	kunal.puri@numeca.be
RAI, Pratik ONERA - France	pratik.rai@onera.fr
RANOCCHA, Hendrik TU Braunschweig - Germany	h.ranocha@tu-bs.de
RUBIO CALZADO, Gonzalo Universidad Politécnica de Madrid - Spain	g.rubio@upm.es
RUEDA-RAMÍREZ, Andrés Mauricio Universidad Politécnica de Madrid - Spain	am.rueda@upm.es
SAAVEDRA, Laura Universidad Politécnica de Madrid - Spain	laura.saavedra@upm.es
SCHNEIDER, Kleiton Andre Universidad de Málaga - Spain	ks@uma.es
SINGH, Vikram Israel Institute of Technology - Israel	vikramsingh001@gmail.com
TAVELLI, Maurizio Università degli Studi di Trento - Italy	m.tavelli@unitn.it
TELLO DEL CASTILLO, Lourdes Universidad Politécnica de Madrid - Spain	l.tello@upm.es
TELLO DEL CASTILLO, José Ignacio Universidad Politécnica de Madrid - Spain	j.tello@upm.es
TEMIMI, Helmi Gulf University for Science & Technology - Kuwait	temimi.h@gust.edu.kw
TITAREV, Vladimir Federal Research Center Computer Science and Control - Russia	titarev@mail.ru
TOKAREVA, Svetlana Los Alamos National Laboratory - USA	tokareva@lanl.gov
TORLO, Davide Universität Zürich - Switzerland	davide.torlo@math.uzh.ch
TORO, Eleuterio University of Trento - Italy	torosemail@gmail.com

VÁZQUEZ-CENDÓN, M. Elena Universidade de Santiago de Compostela - Spain	elena.vazquez.cendon@usc.es
VEIGA, Maria Han Universität Zürich - Switzerland	han.veiga@gmail.com
VERSBACH, Lea Miko Lund University - Sweden	lea@maths.lth.se
WEBER, Jens TU Darmstadt - Germany	weber@fdy.tu-darmstadt.de
YEE, Helen NASA Ames Research Center- USA	Helen.M.Yee@nasa.gov
YU, Xijun Institute of Applied Physics and Computational Mathematics - China	yuxj@iapcm.ac.cn
ZHENGUO, Yan Imperial College London - UK	z.yan17@imperial.ac.uk
ZHU, Yujie TU München - Germany	yujie.zhu@tum.de