

overview programme

Wednesday, 26 September 2018

08:00 - 13:00 14:00 - 17:30	Registration/ Support Desk hours			
8:40-9:00	Welcome and Orientation Room INCA			
9:00-9:45	<p>Sivaramakrishnan Balachandar (University of Florida, USA) Improved Euler-Lagrange Approach that captures fully-resolved physics for Multiphase Turbulence <i>Chair: B. Geurts</i> Hotel: Quetzal Room: INCA</p>			
9:45-10:30	<p>Oliver Paschereit (TU Berlin, Germany) How to solve the thermoacoustic problem in gas turbine combustors? <i>Chair: L. Vervisch</i> Hotel: Quetzal Room: INCA</p>			
10:30-11:00	Coffee Break			
Room	Hotel: Quetzal Room: INCA	Hotel: Quetzal Room: TEO	Hotel: Le Prose Room: Pinede	Hotel: Le Prose Room: Le Prose
11:00-12:40	<p>Mini-Symposium on Transition Modeling - I <i>Chair: Daniele Simoni</i></p>	<p>Mini-Symposium on Large Eddy Simulations and HighOrder methods for the prediction of Turbomachinery Flows <i>Chair: Laurent Gicquel</i></p>	<p>Acoustics and vibrations <i>Chair: N. Sandham</i></p>	<p>Control <i>Chair: M. Leschziner</i></p>
12:40-14:00	Lunch			
14:00-15:40	<p>Wakes and Jets <i>Chair: A. Boguslawski</i></p>	<p>Heat transfer - I <i>Chair: A. Johansson</i></p>	<p>Two-phase flows - I <i>Chair: B. Geurts</i></p>	<p>Roughness - I <i>Chair: B. Mc Keon</i></p>
15:40-16:40	<p>Poster Overview <i>Chair: S. Hickel</i> Hotel QUETZAL - Room INCA</p>			
16:40-17:10	Coffee Break			
17:10-18:30	<p>Mini Symposium on Exploiting modern HighPerformance Computing platforms for Large-Eddy Simulation <i>Chair: Vincent Moureau</i></p>	<p>Non-Newtonian flows <i>Chair: S. Jakirlic</i></p>	<p>Combustion - I <i>Chair: W. Jones</i></p>	<p>Heat transfer - II <i>Chair: S. Menon</i></p>
19:00	Welcome Cocktail			

overview programme

Thursday, 27 September 2018

08:00 - 12:30 13:30 - 17:00	Registration/ Support Desk hours			
8:30 - 9:15	<p>Jerry Westerweel (TU Delft, The Netherlands) A new look at turbulence – modern optical techniques for turbulent flows <i>Chair: K. Flack</i> Hotel: Quetzal Room: INCA</p>			
9:15-10:00	<p>Beverley Mc Keon (California Institute of Technology, USA) Modeling and Control of Wall Turbulence via Resolvent Analysis <i>Chair: E. Dick</i> Hotel: Quetzal Room: INCA</p>			
10:00-10:30	Coffee Break			
Room	Hotel: Quetzal Room: INCA	Hotel: Quetzal Room: TEO	Hotel: Le Prose Room: Pinede	Hotel: Le Prose Room: Le Prose
10:30-12:10	<p>Mini-Symposium on Transition Modeling - II <i>Chair: Erik Dick</i></p>	<p>Mini-Symposium on Numerical modelling and validation experiments of near-wall reactive flows <i>Chair: Amsini Sadiki</i></p>	<p>Roughness - II <i>Chair: A. Pinelli</i></p>	<p>Combustion - II <i>Chair: L. Vervisch</i></p>
12:10-13:30	Lunch			
13:30-14:15	<p>Philippe Spalart (The Boeing Company, USA) The Relationship between DNS and RANS <i>Chair: W. Rodi</i> Hotel: Quetzal Room: INCA</p>			
14:15-15:35	<p>Mini-Symposium on Flame and Flow Topologies - I <i>Chair: Luis Cifuentes</i></p>	<p>Hydrodynamic stability <i>Chair: R. Pecnik</i></p>	<p>Pulsating flows <i>Chair: A. Tomboulides</i></p>	<p>Mass transfer <i>Chair: K. Suga</i></p>
15:35-16:00	Coffee Break			
16:00-17:40	<p>Mini-Symposium on Flame and Flow Topologies - II <i>Chair: Luis Cifuentes</i></p>	<p>Jets <i>Chair: S. Mendez</i></p>	<p>Environmental flows <i>Chair: S. Hickel</i></p>	<p>Turbulence modelling <i>Chair: U. Piomelli</i></p>
18:00 - 20:00	Excursion			
20:00-23:00	Conference Dinner			

overview programme

Friday, 28 September 2018

08:30 - 13:00 14:00 - 15:30	Registration/ Support Desk hours			
Room	Hotel: Quetzal Room: INCA	Hotel: Quetzal Room: TEO	Hotel: Le Prose Room: Pinede	Hotel: Le Prose Room: Le Prose
9:00-10:40	Heat transfer - III <i>Chair: E. Balaras</i>	Two-phase flows - II <i>Chair: J. Frohlich</i>	Modelling <i>Chair: E. Serre</i>	Turbulent Boundary Layers - I <i>Chair: L. Djenidi</i>
10:40-11:10	Coffee Break			
11:10-12:50	Roughness - II <i>Chair: P. Spalart</i>	Large-Eddy Simulation <i>Chair: B. Koobus</i>	Combustion - III <i>Chair: E. Mastorakos</i>	Turbulent Boundary Layers - II <i>Chair: W. Elsner</i>
12:50-14:10	Lunch			
14:10-14:55	<p>Peter Schmid (Imperial College, UK) Data assimilation and dynamic observers: from sparse measurements to flow information and control <i>Chair: J. Westerweel</i> Hotel: Quetzal Room: INCA</p>			
14:55-15:40	<p>Luc Vervisch (INSA Rouen, France) Turbulent reacting flow modeling: Recent developments in sub-grid scale signal reconstruction in flames and statistical methods for reactive-particle dynamics <i>Chair: A. Tomboulides</i> Hotel: Quetzal Room: INCA</p>			
15:40-16:00	<p>Closing address - Announcing ETMM13 Room: Hotel QUETZAL - Room INCA</p>			

8:00 - 13:00 14:00 - 17:30	Registration/ Support Desk hours			
8:40-9:00	Welcome and Orientation Hotel: Quetzal Room: INCA			
9:00-9:45	Sivamakrishnan Balachandar (University of Florida, USA) Improved Euler-Lagrange Approach that captures fully-resolved physics for Multiphase Turbulence Chair: B. Geurts Hotel: Quetzal Room: INCA			
9:45-10:30	Oliver Paschereit (TU Berlin, Germany) How to solve the thermoacoustic problem in gas turbine combustors? Chair: L. Vervisch Hotel: Quetzal Room: INCA			
10:30-11:00	Coffee Break			
11:00-12:40	ROOM: Hotel QUETZAL - Room INCA	ROOM: Hotel QUETZAL - Room TEO	ROOM: Hotel LE PROSE - Room PINEDE	ROOM: Hotel LE PROSE - Room LE PROSE
	Mini-Symposium on Transition Modeling - I Chair: Daniele Simoni	Mini-Symposium on Large Eddy Simulations and HighOrder methods for the prediction of Turbomachinery Flows Chair: Laurent Gicquel	Acoustics and vibrations Chair: N. Sandham	Control Chair: M. Leschziner
11:00	Prediction of transition in a turbine cascade using LES Ettore Bertolini, Wolfgang Sanz	High fidelity turbomachinery simulation James Tyacke, Robert Watson, Will Trojak, Paul Tucker	On the role of a centrifugal instability in the vortex induced vibration of a two-degrees of freedom circular cylinder at moderate Reynolds numbers Daniel Pastrana, Juan Carlos Cajas, Oriol Lehmkuhl, Ivette Rodriguez, Mariano Vázquez, Guillaume Houzeaux	Electroactive morphing of an Airbus A320 wing increasing the aerodynamic performances in high Reynolds numbers: numerical simulations and TRPIV around experimental prototype Nikos Simiriotis, Gurvan Jodin, Abderahmane Marouf, Yannick Hoarau, Gilles Harran, J.F. Rouchon, Marianna Braza
11:20	Large-eddy simulation of bypass transition using high-order spectral difference schemes Brijesh Pinto, Guido Lodato	Feasibility and industrial relevance of Large-Eddy Simulation for aeronautical compressors Jerome de Laborderie, Eric Lippinois	Measurements of wall pressure fluctuations spectra Simon Prigent, Christophe Bailly, Edouard Salze	Flow Characterisation of Serrated Trailing-Edge Extensions Muhammad Farrukh Shahab, Mohammad Omidyeganeh, Alfredo Pinelli
11:40	Application of an algebraic transition model to loss prediction of a low pressure turbine cascade with endwalls Slawomir Kubacki, Pawel Jonak, Erik Dick	Assessment of a coolant injection model on cooled high-pressure vanes in large eddy simulation Mael Harnieh, Martin Thomas, Romain Bizzari, Laurent Gicquel, Florent Duchaine	Incipient buffet over a laminar-flow airfoil - A DNS study at moderate Reynolds numbers Markus Zauner, Neil Sandham	Assessment of skin-friction-reduction techniques on a turbulent wing section Marco Atzori, Ricardo Vinuesa, Alexander Stroh, Bettina Frohnappel, Philipp Schlatter
12:00	Flow Transition Simulation at High Angle of Attack Using Three-Equation $k-\omega-\gamma$ Transition/Turbulence Model Guangxing Wang, Muchen Yang, Zhixiang Xiao, Song Fu	In situ processing techniques for high order DGM and application to full span LP turbine cascade Koen Hillewaert, Michel Rasquin	Investigation of effect of Porous material on Trailing Edge Noise by Overset-LES Varun Bharadwaj Ananthan, Rinie Akkermans, Paul Bernicke, Roland Ewert, Juergen Dierke, Lennart Rossian	Controlling the influence of outer large-scale structures on wall friction Michael Leschziner, Lionel Agostini
12:20	Uncertainty Quantification based Laminar-Turbulent Transition Modelling Shahid Mughal, Henrique Raposo	Large Eddy Simulations of the dispersion and dissipation of injected compositional inhomogeneities in the Cambridge Wave Generator Jocelino Rodrigues, Dongwon Noh, Salvador Navarro-Martinez, Simone Hochgreb, William Jones		The effect of the configuration of micro-cavities on the attenuation of sweep events Anton Silvestri, Farzin Ghanadi, Maziar Arjomandi, Benjamin Cazzolato, Anthony Zander, Rey Chin

12:40-14:00	Lunch			
14:00-15:40	ROOM: Hotel QUETZAL - Room INCA	ROOM: Hotel QUETZAL - Room TEO	ROOM: Hotel LE PROSE - Room PINEDE	ROOM: Hotel LE PROSE - Room LE PROSE
	Wakes and Jets <i>Chair: A. Boguslawski</i>	Heat transfer - I <i>Chair: A. Johansson</i>	Two-phase flows - I <i>Chair: B. Geurts</i>	Roughness - I <i>Chair: B. Mc Keon</i>
14:00	Numerical Simulations of the Flow around a Surface Combatant at 10° Static Drift <i>Emmanuel Guilmineau, Michel Visonneau, Geneva Rubino</i>	Modelling Of Thermal Wall Boundary Conditions At High Prandtl Numbers With Temperature-Dependent Material Properties <i>Helfried Steiner, Christoph Irrenfried</i>	Combining Particle Image velocimetry (PIV) and Laser Induced Incandescence (LII) to measure the velocity field of two-phase flows <i>Luming Fan, Dante McGrath, Cheng Tung Chong, Hongtao Zhong, Simone Hochgreb</i>	Simulation of a low Reynolds number channel flow on staggered roughness element <i>Nisat Anika, Lyazid Djenidi</i>
14:20	An Approach to Scale-Resolving Simulation of Turbulent Flows Using Immersed Boundary Method on Unstructured Meshes <i>Tatiana Kozubskaya, Ilya Abalakin, Alexey Duben, Natalya Zhdanova</i>	DNS Study of turbulent coherent structures and heat transfer in poiseuille-ekman flow <i>Cale Bergmann, Bing-Chen Wang</i>	Two-fluid Eulerian-Eulerian CFD modelling of bubbly flows using an elliptic blending Reynolds stress turbulence model <i>Marco Colombo, Michael Fairweather</i>	Reynolds number effect of drag reduction by traveling wave-like wall Deformation in turbulent channel flow <i>Yusuke Nabee, Ken Kawai, Koji Fukagata</i>
14:40	Large eddy simulation of intake flow in DISI engine using near wall modeling <i>Kaushal Nishad, Florian Ries, Amsini Sadiki, Johannes Janicka, Yongxiang Li</i>	DNS of passive scalar transport fields in turbulent flow at low and high Prandtl numbers <i>Bruno Chaouat</i>	Particle volume fraction effects in simulations of turbulent channel flows <i>David Rupp, Derrick Njobuenu, Michael Fairweather</i>	Contoured transverse grooves for flow separation control and bluff-body drag reduction <i>Alessandro Mariotti, Guido Buresti, Maria Vittoria Salvetti</i>
15:00	Wake development of a floating wind turbine in free pitch motion <i>Stanislav Rockel, Hawwa Kadum, Joachim Peinke, Michael Hölling, Raúl Bayoán Cal</i>	Direct numerical simulation of heat transfer in a channel with Nikuradse-type roughness <i>Jurriaan Peeters, Neil Sandham</i>	DNS of turbulence modulation in dispersed gas-liquid flow <i>Bernard Geurts, Paolo Cifani, Hans Kuerten</i>	Characterization of the rich, spatio-temporal response of a turbulent boundary layer to dynamic roughness <i>David Huynh, Beverley McKeon</i>
15:20	Numerical investigation of jet-wake interaction for a dual-bell nozzle <i>Simon Loosen, Matthias Meinke, Wolfgang Schroeder</i>	Simulating 3D Non Oberbeck-Boussinesq Flows <i>Andreas Demou, Charalambos Frantzis, Dimokratis G.e. Grigoriadis</i>	The use of particle-resolved simulations for the determination of forces on particles in point-particle simulations <i>Hans Kuerten, Bert Vreman</i>	

Wednesday, 26 September 2018

15:40-16:40	Posters overview Chair: S. Hickel Hotel: Quetzal Room: INCA			
16:40-17:10	Coffee Break			
17:10-18:30	ROOM: Hotel QUETZAL - Room INCA	ROOM: Hotel QUETZAL - Room TEO	ROOM: Hotel LE PROSE - Room PINEDE	ROOM: Hotel LE PROSE - Room LE PROSE
	Mini Symposium on Exploiting modern High-Performance Computing platforms for Large-Eddy Simulation Chair: Vincent Moureau	Non-Newtonian flows Chair: S. Jakirlic	Combustion - I Chair: W. Jones	Heat transfer - II Chair: S. Menon
17:10	Massively Parallel LES of Turbulent Flames and Shocktubs Timo Lipkowicz, Martin Rieth, Andreas Kempf	Non-Newtonian Separated Flow over a Two-Dimensional Ramp Leonardo Castellanos, Juliana Loureiro, Atila Silva Freire	Impact of the relationship between mobility diameter and equivalent sphere diameter in the modeling of turbulent sooting flame Alexandre Bouaniche, Jérôme Yon, Luc Vervisch, Pascale Domingo	Turbulence modelling for flows with strong variation in thermo-physical properties Gustavo Jose Otero Rodriguez, Ashish Patel, Rene Pecnik
17:30	Highly resolved Large-Eddy Simulation of lean-premixed combustion in a semi-industrial burner with finiterate chemistry Pierre Benard, Ghislain Lartigue, Vincent Moureau, Renaud Mercier	Reynolds-Stress Model Applied To The Drag-Reducing Viscoelastic Turbulent Flow Over Backward-Facing Step Kazuki Oda, Takahiro Tsukahara, Suad Jakirlic, Yasuo Kawaguchi	A numerical study of soot evolution in a lab-scale rich-quench-lean burner Savvas Gkantonas, Andrea Giusti, Epaminondas Mastorakos	The stochastic fields method applied to a partially premixed swirl flame with wall heat transfer Daniel Fredrich, William Jones, Andrew Marquis
17:50	Mesh local refinement to enhance effusion cooling models Romain Bizzari, Melissa Ferand, Antoine Dauplain, Gabriel Staffelbach, Stephane Richard, J-D Muller, Théo Ogier, Gorka Exilard, Franck Nicoud	Weissenberg number dependence of linear mechanisms in polymer drag-reduced turbulent channel flow Ryan McMullen, Beverley McKeon, Ashwin Shekar, Michael Graham	DNS-Driven Analysis of Flamelet-Based Turbulent Soot Models for LES Achim Wick, Antonio Attili, Fabrizio Bisetti, Heinz Pitsch	Near-Wall RANS Modelling for Turbulent Heat Transfer in Moderate Prandtl Number Fluids Dominic Sarno, Tim Craft, Hector Iacovides, Adel Nasser
18:10		Numerical Simulation of Drag Reduction in Turbulent Pipe Flow by Fibrous Additives Deepak Kunhappan, Guillaume Balarac, Barthélémy Harthong, Bruno Chareyre, Pierre Dumont	LES evaluation of the spray characteristics impact on the flame in a lean-premixed injection system Patricia Domingo-Alvarez, Pierre Benard, Ghislain Lartigue, Vincent Moureau, Frederic Grisch	Study of scalar fluxes in a plume released from a point source in a turbulent boundary layer Krishna M Talluru, Kapil Chauhan
19:00	Welcome Cocktail			

8:00-12:30 13:30-17:00	Registration/ Support Desk hours			
8:30 - 9:15	Jerry Westerweel (TU Delft, The Netherlands) A new look at turbulence – modern optical techniques for turbulent flows <i>Chair: K. Flack</i> Hotel: Quetzal Room: INCA			
9:15-10:00	Beverly Mc Keon (California Institute of Technology, USA) Modeling and Control of Wall Turbulence via Resolvent Analysis <i>Chair: E. Dick</i> Hotel: Quetzal Room: INCA			
10:00-10:30	Coffee Break			
10:30-12:10	ROOM: Hotel QUETZAL - Room INCA	ROOM: Hotel QUETZAL - Room TEO	ROOM: Hotel LE PROSE - Room PINEDE	ROOM: Hotel LE PROSE - Room LE PROSE
	Mini-Symposium on Transition Modeling - II <i>Chair: Erik Dick</i>	Mini-Symposium on Numerical modelling and validation experiments of near-wall reactive flows <i>Chair: Amsini Sadiki</i>	Roughness - II <i>Chair: A. Pinelli</i>	Combustion - II <i>Chair: L. Vervisch</i>
10:30	Development of an accurate data base on transitional flows in variable pressure gradients <i>Daniele Simoni, Matteo Dellacasagrande, Davide Lengani, Slawomir Kubacki, Erik Dick</i>	Flame-wall interaction in narrow channels: a flame shape regime diagram <i>Kevin Bioche, Guillaume Ribert, Luc Vervisch</i>	The influence of in-plane roughness wavelength relative to the boundary layer thickness <i>Bagus Nugroho, I Ketut Aria Pria Utama, Jason Monty, Nicholas Hutchins, Bharathram Ganapathisubramani</i>	Application of gene expression programming to les modeling of turbulent Premixed flames <i>Markus Klein, Richard Sandberg, Jack Weatheritt, Matthias Schöppelein</i>
10:50	Laminar kinetic energy model based on the Klebanoff-mode dynamics to predict bypass transition on a turbine blade <i>Loïc Jecker, Olivier Vermeersch, Hugues Deniau, Emma Croner, Grégoire Casalis</i>	Flame-wall interactions studied experimentally in a sidewall-quenching geometry <i>Hidemasa Kosaka, Florian Zentgraf, Arne Scholtissek, Christian Hasse, Benjamin Böhm, Andreas Dreizler</i>	Effect of roughness on wall-bounded flows subjected to spanwise rotation <i>Ugo Piomelli, Wen Wu, Junlin Yuan</i>	Numerical characterization of a technically premixed hydrogen flame under conditions close to flashback <i>Daniel Mira, Oriol Lehmkuhl, Ambrus Both, Panagiotis Stathopoulos, Tom Tanneberger, Thoralf Reichel, Christian O. Paschereit, Mariano Vázquez, Guillaume Houzeaux</i>
11:10	POD reduced order model for proper fragment definition in two-scale transition modelling schemes <i>Daniele Simoni, Davide Lengani, Matteo Dellacasagrande, Vianney Yepmo, Pietro Zunino, Marina Ubaldi</i>	Study of non-equilibrium boundary layers in a generic DEF-injection system using DNS <i>Florian Ries, Yongxiang Li, Kaushal Nishad, Johannes Janicka, Amsini Sadiki</i>	Impact of irregular anisotropic surface roughness on the near-wall region of turbulent channel flow <i>Thomas Jelly, Angela Busse</i>	DNS Study of CO Formation in a Staged Gas Turbine Combustor <i>Konstantin Kleinheinz, Antonio Attili, Heinz Pitsch</i>
11:30	Transitional Flow Dynamics Behind a Micro-Ramp <i>Jordi Casacuberta, Koen J. Groot, Qingqing Ye, Stefan Hickel</i>	Effects of detailed chemistry on multiscale analysis of head-on quenching in premixed turbulent combustion <i>Umair Ahmed, Jiawei Lai, Nguyen Anh Khoa Doan, Markus Klein, Nilanjan Chakraborty, Nedunchezhian Swaminathan</i>	Large-eddy simulation of an open-channel flow with rigid submerged vegetation <i>Alessandro Monti, Mohammad Omidyeganeh, Alfredo Pinelli</i>	Numerical Investigation of Lifted Turbulent Flame with PaSR and UFPV models <i>Zhiyi Li, Amsini Sadiki, Alessandro Parente</i>
11:50	A transition-sensitive Reynolds-stress model of turbulence <i>Suad Jakirlic, Robert Maduta, Sebastian West</i>	Investigation on the optimal dimension of Reaction-Diffusion manifold for flame-wall-interactions <i>Christina Strassacker, Viatcheslav Bykov, Ulrich Maas</i>		Response of heat release rate to flame straining in swirling hydrogen-air premixed flames <i>Kozo Aoki, Masayasu Shimura, Yuki Minamoto, Mamoru Tanahashi</i>
12:10-13:30	Lunch			

Thursday, 27 September 2018

13:30-14:15	<p align="center">Philippe Spalart (The Boeing Company, USA) The Relationship between DNS and RANS <i>Chair: W. Rodi</i> Hotel: Quetzal Room: INCA</p>			
14:15-15:35	ROOM: Hotel QUETZAL - Room INCA	ROOM: Hotel QUETZAL - Room TEO	ROOM: Hotel LE PROSE - Room PINEDE	ROOM: Hotel LE PROSE - Room LE PROSE
	<p align="center">Mini-Symposium on Flame and Flow Topologies - I <i>Chair: Luis Cifuentes</i></p>	<p align="center">Hydrodynamic stability <i>Chair: R. Pecnik</i></p>	<p align="center">Pulsating flows <i>Chair: A. Tomboulides</i></p>	<p align="center">Mass transfer <i>Chair: K. Suga</i></p>
14:15	<p>Analysis of Turbulent Combustion DNS Using Computational Singular Perturbation <i>Dimitris M. Manias, Efstathios-Al. Tingas, Francisco E. Hernandez Perez, Riccardo Malpica Galassi, Pietro Paolo Ciottoli, Mauro Valorani, Hong G. Im</i></p>	<p>The secondary instabilities of stationary cross-flow vortices in a Mach 6 swept wing flow <i>Guoliang Xu, Siwei Dong, Jianqiang Chen, Gang Liu, Song Fu</i></p>	<p>LES of a Pulsating Jet Flame in a Hot Co-flow <i>Eray Inanc, Irenäus Wlokas, Andreas Kempf</i></p>	<p>A mass transport study on the turbulent flow over a cylinder using recurrence CFD <i>Sanaz Abbasi, Thomas Lichtenegger</i></p>
14:35	<p>The interplay of strain, curvature and scalar dissipation rate for non-premixed flamelet structures in turbulent combustion <i>Arne Scholtissek, Wang Han, Felix Dietzsch, Christian Hasse</i></p>	<p>Experimental study of the dependence of the precessing vortex core phenomenon in a combustion chamber on swirler and central body geometries <i>Ingrid El Helou, Christos Kakoutas, Epaminondas Mastarakos</i></p>	<p>Effect of flame-to-flame interactions on the flame describing functions of turbulent swirling flames <i>Yu Xia, Davide Laera, Aimee S Morgans, W. P. Jones</i></p>	<p>Extensive investigation of the influence of wall-permeability on turbulent porous channel flows <i>Yusuke Kuwata, Kazuhiko Suga</i></p>
14:55	<p>Topological Features of Reaction Zones in Turbulent Combustion <i>Yuki Minamoto</i></p>	<p>Linear instability of non-ideal fluids in channel flows <i>Jie Ren, Rene Pecnik</i></p>	<p>Assessing PC-MRI-based hemodynamics using CFD <i>Thomas Puisieux, Ramiro Moreno, Simon Mendez, Franck Nicoud</i></p>	<p>A level-set method for mass transfer in bubble swarms <i>Néstor Vinicio Balcázar Arciniega, Oscar Antepará, Jesús Castro, Assensi Oliva</i></p>
15:15	<p>Evaluation of flame area based on detailed chemistry DNS of premixed turbulent hydrogen-air flames in different regimes of combustion <i>Alexander Herbert, Hidemasa Kosaka, Benjamin Böhm, Andreas Dreizler, Nilanjan Chakraborty, Bill Papapostolou, Hong Im, Josef Hasslberger, Markus Klein</i></p>	<p>LES study of global instability in annular jets <i>Karol Wawrzak, Andrzej Boguslawski, Artur Tyliczszak, Michal Saczek</i></p>	<p>LES of the gas-exchange process inside an internal combustion engine using a High-order method <i>George Giannakopoulos, Christos Frouzakis, Saumil Patel, Paul Fischer, Ananias Tomboulides, Konstantinos Boulouchos</i></p>	<p>Comparison of turbulence over porous media with and without structural surface roughness <i>yuki okazaki, Yusuke Kuwata, Kazuhiko Suga</i></p>
15:35-16:00	<p align="center">Break</p>			

	ROOM: Hotel QUETZAL - Room INCA	ROOM: Hotel QUETZAL - Room TEO	ROOM: Hotel LE PROSE - Room PINEDE	ROOM: Hotel LE PROSE - Room LE PROSE
16:00-17:40	Mini-Symposium on Flame and Flow Topologies - II <i>Chair: Luis Cifuentes</i>	Jets <i>Chair: S. Mendez</i>	Environmental flows <i>Chair: S. Hickel</i>	Turbulence modelling <i>Chair: U. Piomelli</i>
16:00	Small-scale flow topologies in the neighborhood of enstrophy and scalar interfaces <i>Luis Cifuentes, Andreas Kempf, Cesar Dopazo</i>	Impact of inlet conditions on spatio-temporal evolution of natural and excited square jets <i>Artur Tylliszczak, Bernard Geurts</i>	Energy Transfer and Dissipation Tensor Anisotropy in Atmospheric Turbulence <i>Tiago Pestana, Matthias Thalhammer, Stefan Hickel</i>	DNS and RANS modeling of transcritical turbulent boundary layers at supercritical pressure <i>Soshi Kawai, Yoshihito Oikawa</i>
16:20	Reconfiguration of Turbulent Large-scale Structures in a Cuboidal Mixed Convection Cell <i>Michael Mommert, Daniel Schiepel, Daniel Schmeling, Claus Wagner</i>	Numerical robustness of turbulence transition sensitive biomedical flows <i>Vladeta Zmijanovic, Simon Mendez, Franck Nicoud</i>	A new model for rotating shear flow: from the rotating channel to geophysics and astrophysics <i>Ying Zhu, Claude Cambon, Fabien Godeferd</i>	A pseudo-stochastic model for numerical simulation of turbulent flow <i>Carlo Cintolesi, Etienne Mémin</i>
16:40	Permanence of large eddies in Richtmyer-Meshkov turbulence <i>Olivier Souldard, Florian Guillois, Jérôme Griffond</i>	Experimental study of coherent structures and mixing in turbulent swirling jets <i>Alexey Lobasov, Vladimir Dulin, Dmitriy Markovich, Sergey Alekseenko</i>	Dual Navier-Stokes / lattice Boltzmann method for urban wind flow <i>Marta Camps Santasmasas, Alistair Revell, Ben Parslew, Adrian Harwood, William Crowther</i>	Performance assessment of scale-resolving models in computing turbulent flow over a porous wall <i>Benjamin Krumbein, Robert Maduta, Suad Jakirlic, Cameron Tropea</i>
17:00	Local flow topology analysis applied to bubble-induced turbulence <i>Josef Hasslberger, Markus Klein, Nilanjan Chakraborty</i>	Large-eddy simulation of non-circular jet flow in a pilot-scale inline high-shear static mixer <i>Vipin Michael, Ioannis Bagkeris, Robert Prosser, Umair Ahmed</i>	LES of interfacial turbulence at an air-water interface <i>Bernard Geurts, Vincenzo Armenio, Santiago Castano</i>	Data-driven discovery of algebraic stress models using elastic net regularisation <i>Martin Schmelzer, Richard P. Dwight, Paola Cinnella</i>
17:20	Numerical Investigations of Phase-Separation During Multi-Component Mixing at Super-Critical Conditions <i>Principio Tudisco, Suresh Menon</i>	Assessment of Real-Gas Effects in High-Pressure Gas Injections at Engine-Relevant Conditions <i>Vasileios David Sakellarakis, Walter Vera-Tudela, Yuri M. Wright, Konstantinos Boulouchos, Matthias Banholzer, Michael Pfizner</i>	Small Péclet-small Mach number approximation and its implications on statistical turbulence models <i>Jean-Cédric Chkair, Olivier Souldard, Jérôme Griffond, Xavier Blanc</i>	An improved wall function for large eddy simulation <i>Brendan Ehimen Omozopia Iyamabo, Imran Afgan, Dominique Laurence, Alistair Revell</i>
18:00-20:00	Excursion			
20:00-23:00	Conference Dinner			

Friday, 28 September 2018

8:30-13:00 14:00-15:30	Registration/ Support Desk hours			
9:00-10:40	ROOM: Hotel QUETZAL - Room INCA	ROOM: Hotel QUETZAL - Room TEO	ROOM: Hotel LE PROSE - Room PINEDE	ROOM: Hotel LE PROSE - Room LE PROSE
	Heat transfer - III <i>Chair: E. Balaras</i>	Two-phase flows - II <i>Chair: J.Frohlich</i>	Modelling <i>Chair: E. Serre</i>	Turbulent Boundary Layers - I <i>Chair: L. Djenidi</i>
9:00	Turbulent heat transfer of transitional regime with helical turbulent in annular flow <i>Takehiro Fukuda, Takahiro Tsukahara</i>	A first simulation of sediment transport with polymorph particles <i>Ramandeep Jain, Silvio Tschisgale, Jochen Fröhlich</i>	LES Method for generating broad-banded turbulence for meteorological events <i>Masaharu Kawaguchi, Tetsuro Tamura, Tao Tao, Hidenori Kawai</i>	A simple method for estimating the friction velocity in turbulent boundary layers <i>Lyazid Djenidi, Krishna M. Talluru, Robert A. Antonia</i>
9:20	DNS of rotating channel flow with a passive scalar at moderate Reynolds numbers <i>Geert Brethouwer</i>	Direct numerical simulation of rising bubble with path instability <i>Oscar Antepara, Néstor Vinicio Balcázar Arciniega, Joaquim Rigola, Assensi Oliva</i>	Numerical modelling of macroscopic behavior of a crowd of people under emergency conditions triggered by an incidental release of a heavy gas <i>Sasa Kenjeres</i>	The temporal boundary layer under the action of decaying free-stream turbulence <i>Melissa Kozul, R. Jason Hearst, Jason P. Monty, Bharathram Ganapathisubramani, Daniel Chung</i>
9:40	Second-moment closure for the dissipation rate of the temperature variance <i>Gaëtan Mangeon</i>	Turbulence-Interface Interaction in Large-Eddy Simulations with a Two-Fluid Model <i>Richard Meller, Markus Klein, Dirk Lucas, Fabian Schlegel</i>	RANS-like fluid simulations of magnetically confined plasmas in tokamak: a new life for the k-epsilon model? <i>Serafina Baschetti, Hugo Bufferand, Thomas Cartier-Michaud, Guido Ciraolo, Philippe Ghendrih, Frédéric Schwander, Patrick Tamain, Eric Serre</i>	Scaling proposal for turbulence intensity profiles of turbulent boundary Layers with pressure gradient <i>Artur Drózdź, Witold Elsner, Mathias Romariczky</i>
10:00	Application of the dual-mesh hybrid RANS-LES method to the flow in a differentially heated square cavity <i>Abdelmagid Emad Abdelmagid Ali, Imran Afgan, Dominique Laurence, Alistair Revel</i>	Modal Description of Two-Phase Pipe Flow <i>Bianca Viggiano, Olaf Skjæraasen, Heiner Schümann, Murat Tutkun, Raúl Bayoán Cal</i>	Direct Numerical Simulation of Deterministic Turbulence <i>Ahmed Al-Shabab, Mark Savill</i>	Reynolds-number effects in turbulent boundary layers around wing sections <i>Ricardo Vinuesa, Prabal S. Negi, Marco Atzori, Ardeshir Hanifi, Dan S. Henningson, Philipp Schlatter</i>
10:20		Application of the minimum-dissipation-Barbina mixed model to turbulent bubble-laden channel flows <i>Larissa Bruna Streher, Paolo Cifani, Roel Verstappen</i>	Simulation of Hypersonic Boundary Layer Transition Using $k-\omega-\gamma$ Transition Model on Unstructured Grids <i>Xiaoling Huang, Muchen Yang, Zhixiang Xiao</i>	History effects on cambered and symmetric wing sections <i>Alvaro Tanarro, Ricardo Vinuesa, Philipp Schlatter</i>
10:40-11:10	Break			

	ROOM: Hotel QUETZAL - Room INCA	ROOM: Hotel QUETZAL - Room TEO	ROOM: Hotel LE PROSE - Room PINEDE	ROOM: Hotel LE PROSE - Room LE PROSE
11:10-12:50	Roughness - II <i>Chair: P. Spalart</i>	Large-Eddy Simulation <i>Chair: B. Koobus</i>	Combustion - III <i>Chair: E. Mastorakos</i>	Turbulent Boundary Layers - II <i>Chair: W. Elsner</i>
11:10	Direct and Large Eddy Simulations of turbulent channel flow with an undulated wall <i>Federico Bernardoni, Christian Santoni, Umberto Ciri, Maria Vittoria Salvetti, Stefano Leonardi</i>	Improved LES of turbulent channel flow by using OpenFOAM with the Explicit Algebraic SGS model <i>Matteo Montecchia, Thilo Knacke, Geert Brethouwer, Stefan Wallin, Arne V. Johansson</i>	Large Eddy Simulation of an opposed jet Turbulent Flame <i>Yu Gong, William Jones, A.J. Marquis</i>	Revisiting the amplitude modulation in wall-bounded turbulence: towards a robust definition <i>Eda Dogan, Ramis Örlü, Ricardo Vinuesa, Philipp Schlatter</i>
11:30	Experimental and numerical study of the turbulent boundary layer over Shallow dimples <i>Phillippe Spalart, Mikhail Shur, Mikhail Strelets, Andrey Travin, Keith Paschal, Steven Wilkinson</i>	On the extension of the integral length-scale approximation subfilter-scale stress model to complex geometries <i>Oriol Lehmkuhl, Ugo Piomelli, Guillaume Houzeaux</i>	Large Eddy Simulation of Supersonic Combustion in a Cavity-based Scramjet <i>Jiangheng Ruan, Pascale Domingo, Guillaume Ribert</i>	DNS study on combined-convection turbulent boundary layer with adverse pressure gradient on varying wall thermal conditions <i>Hirofumi Hattori, Yosuke Inagawa, Tomoya Houra, Masato Tagawa</i>
11:50	Skin friction measurements of systematically-varied roughness: probing the Role of roughness amplitude and skewness <i>Karen Flack, Michael Schultz, Julio Barros</i>	Impact of realistic inlet condition on LES predictions of isolated high pressure vanes <i>Martin Thomas, Florent Duchaine, Laurent Gicquel, Charlie Koupper</i>	A-priori evaluation of finite rate scale similarity based combustion models in les of a non-premixed jet flame with local extinction <i>Ali Shamooni, Amsini Sadiki, Alberto Cuoci, Tiziano Faravelli</i>	The effects of Froude number on a turbulent boundary layer with a free-surface <i>Farshad Nasiri, Elias Balaras</i>
12:10	Rearrangement of secondary vortices over spanwise heterogeneous roughness <i>Alexander Stroh, Pourya Forooghi, Bettina Frohnappel</i>	A seamless hybrid RANS/LES model with dynamic Reynolds- stress correction for high Reynolds number flows on coarse grids <i>Phillipp Nguyen, Juan Uribe, Imran Afgan, Dominique Laurence</i>	Transition in the Minimum Ignition Energy for the localised forced ignition of turbulent homogeneous mixtures <i>Charles Turquand d'Auzay, Nilanjan Chakraborty, Vassilios Papapostolou, Samer Ahmed</i>	The influence of free-stream perturbations on turbulent boundary layers <i>Jiho You, Tamer Zaki</i>
12:30		Combining a ddes model with a dynamic variational multiscale formulation <i>Alain Dervieux, Bruno Koobus, Stephen Wornom, Emmanuelle Itam</i>	Modeling and simulation of supercritical flows <i>Guillaume Ribert, Umut Guven</i>	
12:50-14:10	Lunch			
14:10-14:55	Peter Schmid (Imperial College, UK) Data assimilation and dynamic observers: from sparse measurements to flow information and control <i>Chair: J. Westerweel</i> Hotel: Quetzal Room: INCA			
14:55-15:40	Luc Vervisch (INSA Rouen, France) Turbulent reacting flow modeling: Recent developments in sub-grid scale signal reconstruction in flames and statistical methods for reactive-particle dynamics <i>Chair: A. Tomboulides</i> Hotel: Quetzal Room: INCA			
15:40-16:00	Closing address - Announcing ETMM13 Hotel: Quetzal Room: INCA			