PROGRAMME DU 5EME COLLOQUE INCA

Jour de passage	Session	Salle de visioconférence	Numéro	Premier auteur	Auteurs complémentaires	Titre de la contribution	Horaire de passage
Mercredi 7 avril	Polluants et gaz à effet de serre 1 - Expérimental	1	1	Aurélien Perrier	M Bouvier, A Cayre, J Yon, G Cabot, F Grisch	Soot size assessments in a swirl stratified premixed C2H4/air flame: Comparison between in- and ex-situ measurements	10:50-11:10
			2	Symphorien Grimonprez	J Wu, A Faccinetto, S Gosselin, E Riber, B Cuénot, M Cazaunau, E Pangui, P Formenti, JF Doussin, D Petitprez, P Desgroux	Hydrophilic properties of soot particles exposed to OH radical: a possible new mechanism involved in the contrail formation	11:10-11:30
			3	M Bouvier	A Perrier, A Vandel, F Lefebvre, G Godard, G Cabot, J Yon, F Grisch	Experimental investigation of soot production in a swirl stratified premixed flame using various optical diagnostics	11:30-11:50
			4	A Bodor	A Cuoci, J Yi, B Betrancourt, N Darabiha, B Franzelli	Primary particle diameters in sooting flames: a challenge for LII measurements and for validation of numerical modeling	11:50-12:10
	Méthodes numériques innovantes	2	5	Kaidia Wan	C Barnaud, L Vervisch, P Domingo	Machine learning for CPU efficient detailed combustion chemistry in computational fluid dynamics	10:50-11:10
			6	Pierre Boivin	S Zhao, G Farag, M Tayyab	Fully conservative Lattice-Boltzmann modelling of reactive flows	11:10-11:30
			7	Andréa Seltz	P Domingo, L Vervisch	Machine learning for modeling particulate and soot emissions from aeronautical engines	11:30-11:50
	Allumage	1	8	Karl Topperwien	R Vicquelin	Light-round simulation of an annular spray-flame combustor with ambient temperature walls	14:00-14:20
			9	Javier Crespo-Anadon	B Cuénot, E Riber, S Richard, M Bellenoue, J Sotton	Comparison of LES and experiments of methane-air ignition in a closed chamber under various turbulent conditions	14:20-14:40
			10	Haris Musaefendic	G Parant, R Mercier, J Leparoux, S Puggelli	A reduced-order model to predict the stability of combustion chambers for relight conditions	14:40-15:00
			11	Laurent François	J Dupays, M Massot	High- fidelity one-dimensional boundary model of solid propellant combustion for the simulation of the ignition transients of complete solid rocket motors	15:00-15:20
			12	Hugo Quintens	C Strozzi, M Bellenoue	Experimental investigation of the deflagration/autoignition/detonation transition mechanisms in a closed vessel with n-decane/O2/Ar mixtures: influence of the temperature gradient in the end-gas.	15:20-15:40
	Diagnostics expérimentaux	2	13	Sylvain Petit	P Xavier, G Godard, F Grisch	Surface temperature measurements in combustors: accuracy improvement of the phosphor thermometry technique	14:00-14:20
			14	Thomas Panaget	S Batut, Y Fenard, L Pillier, G Vanhove	Insight into the ozone-assisted low-temperature combustion of DME by means of stabilized cool flames	14:20-14:40
			15	M Truffot	A Ivaldi, A Renaud, L Zimmer, F Richecoeur	Optical flow and POD based processing for non-linear dynamic description of a two-phase flow	14:40-15:00
			16	Emeric Boigné	M Ihme	X-ray computed tomography to measure 3D gas-temperature in multi-phase combustion systems	15:00-15:20
			17	Sylvain Legros	B Barviau, F Grisch	Chirped-probe-pulse femtosecond coherent anti-Stokes Raman scattering for gas-phase temperature measurements in high-pressure kerosene/air flames	15:20-15:40
	Instabilités de combustion 1	1	18	G Vignat	Preethi Rajendram Soundararajan, D Durox, A Renaud, S Candel	The flame describing function and flame dynamics under self-sustained oscillations	16:00-16:20
			19	Sylvain Marragou	I Boxx, L Selle, T Poinsot, T schuller	Measurements of the transfer function of partially premixed swirling flames in the PRECCINSTA gas turbine model combustor	16:20-16:40
			20	Clément Patat	F Baillot, JB Blaisot, E Domingues, G Vignat, PR Soundararajan, A Renaud, D Durox, S Candel	Dynamical blow-out of swirling spray flames induced by transverse acoustic oscillations	16:40-17:00
			21	Abhijeet Badhe	C Laurent, C Lapeyre, F Nicoud	Low-Order Thermoacoustic Analysis of Real Engines	17:00-17:20
			22	David Marchal	A Fougnie, T Schmitt, S Ducruix	Studying acoustic damping in a nonreactive pressurized chamber combining experiments, simulations and modeling	17:20-17:40
	Spray, gouttes et écoulement multiphasique 1	2	23	Victor Boniou	T Schmitt, A Vié	Comparative study of interface tracking methods for the description of interface dynamics and droplet evaporation	16:00-16:20
			24	Yahia Atmani	F Pecquery, M Cailler, V Moureau	Consistent scalar transport in front capturing methods: application to two-phase heat transfer	16:20-16:40
			25	Artur Carvalho Santos	A Vié	Effect of drag force modelling on droplet evaporation	16:40-17:00
			26	Gael Parant	L Zimmer, A Renaud, F Richecoeur	Analytical-experimental comparison methodology for the evaporation of liquid fuel droplets in the vicinity of a flame.	17:00-17:20
			27	Roxane Letournel	F Laurent, M Massot, A Vié	On the accurate prediction of preferential concentration in Large Eddy Simulation of particle-laden flow	17:20-17:40
Jeudi 8 avril	Instabilités de combustion 2	1	28	Andrea Aniello	D Laera, L Selle, T Schuller, T Poinsot	Impact of H2 pilot injection on the acoustic response of a flow-swirled flame	10:20-10:40
			29	Clément Patat	F Baillot, JB Blaisot, E Domingues	Dependence of the thermoacoustic coupling on flame power for swirling spray flames at acoustic pressure antinodes	10:40-11:00
			30	Preethi Rajendram Soundararajan	G Vignat, D Durox, A Renaud, S Candel	Impact of injector characteristics on combustion instabilities in a swirl-spray combustor	11:00-11:20
			31	Anthony Cellier	C Lapeyre, G Oztarlik, T Poinsot, T Schuller, L Selle	Detection of precursors of Thermoacoustic Instability using Deep Learning Techniques	11:20-11:40
			32	Anthony Desclaux	P Gajan, M Orain, J Garraud, V Bodoc	Combustion stability – experimental investigation	11:40-12:00
	Stabilisation de flamme	2	33	Yacine Bechane	V Blanchard, N Minesi, C Laux, B Fiorina	Numerical simulations of turbulent flame stabilization by nanosecond repetitively pulsed discharges	10:20-10:40
			34	Quentin Cazères	E Riber, B Cuénot	Numerical study of a confined hydrogen-enriched premixed methane/air swirling flame using detailed chemistry	10:40-11:00
			35	Léo Cunha	A Vié, S Ducruix	Numerical study of flame shape stabilisation and transitions on the BIMER combustor	11:00-11:20
			36	P W Agostinelli	YH Kwah, S Richard, G Exilard, J Dawson, L Gicquel, T Poinsot	Design through LES of a spinning flame combustor, Impact of operating conditions on flame stabilization and thermal load	11:20-11:40
			37	Hassan Tofaili	G Lodato, L Vervisch, P Clavin	Detonation stability: New paradigms for the control of rotating detonation engines	11:40-12:00
	Polluants et gaz à effet de serre 2 - Numérique	1	38	Kévin Torres-Monclard	O Gicquel, R Vicquelin	Assessment of soot radiation modelling to predict heat transfer in turbulent flames	14:00-14:20
			39	Constantin Nguyen Van	R Mercier, M Cailler, B Fiorina	Modeling NOx formation in turbulent spray flames using virtual chemistry	14:20-14:40
			40	Hernando Maldonado-Colman	N Darabiha, B Fiorina	Modelling soot formation in LES of turbulent flames using virtual chemistry	14:40-15:00
			41	L Tardelli	N Darabiha, D Veynante, B Franzelli	Reconsidering the good practice guidelines for LES of turbulent sooting flames	15:00-15:20
	Spray, gouttes et écoulement multiphasique 2	2	42	Axel Ivaldi	L Zimmer	Liquid phase envelope estimation in two-phase combustion	14:00-14:20
			43	C Brunet	P Domingo-Alvarez, G Godard, M Caceres, F Frindt, S Richard, G Cabot, V Moureau, F Grisch	Detailed analysis of a swirl-stabilized kerosene spray flame under relevant aero-engine conditions with Phase Doppler Anemometry experiments and LES simulations	14:20-14:40
			44	Varun Shastry	E Riber, B Cuénot, L Gicquel, L Voivenel	Numerical study of swirled multicomponent spray flames in gas turbine combustors	14:40-15:00
			45	J. Wirtz	E Riber, B Cuénot	Numerical Dual Swirl Spray Stabilized Burner: Comparison of conventional and alternative fuels	15:00-15:20
	Installations expérimentales	1	46	Cornelia Irimiea	A Vincent, JP Dufitumukiza, KP Geigle, A Ristori, Z Yin, J Yon, F Guichard, N Fdida, P Cherubini, D Carru, D Gaffie, X Mercier, AK Mohamed	Semi–technical aero-engine combustors – a glimpse on combustion processes given by in-situ optical techniques	15:40-16:00
			47	Marie-Eve Clavel	A Vandel, B Quevreux, F Colin, A Cayre, F Grisch, G Cabot, B Renou	System design and preliminary evaluation of a High-Altitude Relight Test Facility - HARTUR	16:00-16:20
			48	M Roussillo	P Scouflaire, N Darabiha, D Veynante, S Candel, B Franzelli	Investigating the effect of the injector design and ot the operating conditions on soot production in a rich premixed model scale combustor	16:20-16:40
			49	C Brunet	P Domingo-Alvarez, P Malbois, E Salaun, G Godard, M Caceres, G Cabot, B Renou, G Lartigue, V Moureau, S Puggelli, S Richard, F Grisch	Challenges and opportunities for laser diagnostics to make high-pressure aircraft engines clean and efficient	16:40-17:00
	Spray, gouttes et écoulement multiphasique 3	2	50	Thomas Schmitt	M Pelletier, S Ducruix	Multi-fluid models for two-phase and transcritical flows, Application to rocket engine con gurations with the AVBP solver	15:40-16:00
			51	Romain Janodet	C Guillamon, V Moureau, R Mercier, G Lartigue, P Bénard, T Ménard, A Berlemont	Massively Parallel Large-Eddy Simulations of Primary Atomization on Adaptive Unstructured Meshes- Interface capturing algorithm and multiscale coupling perspectives	16:00-16:20
			52	Matthias Averseng	D Zuzio, JL Estivalèzes	Surface density evolution in Direct Numerical Simulations of periodical liquid sheet assisted atomization	16:20-16:40
			53	Carlos Guillamon	R Janodet, L Voivenel, R Mercier, V Moureau	A novel methodology to simulate fuel injection in multipoint systems - Application to liquid jet in crossflow	16:40-17:00