

List of publications

LIST OF PUBLICATIONS ASSOCIATED TO THE WORK PERFORMED IN INTECOCIS (List obtained from the Open Archive [OATAO](#)): YOU CAN DOWNLOAD THE PAPERS DIRECTLY ON OATAO

Ni, Franchine and Miguel-Brebion, Maxence and Nicoud, Franck and Poinso, Thierry
Accounting for Acoustic Damping in a Helmholtz Solver. (2017) AIAA Journal, vol. 55 (n°
4). pp. 1205-1220. ISSN 0001-1452

Daviller, Guillaume and Brebion, Maxence and Xavier, Pradip and Staffelbach, Gabriel and
Müller, Jens-Dominik and Poinso, Thierry A Mesh Adaptation Strategy to Predict Pressure
Losses in LES of Swirled Flows. Flow Turbulence and Combustion. ISSN 1386-6184

Ghani, Abdulla and Poinso, Thierry Flame Quenching at Walls: A Source of Sound
Generation. (2017) Flow Turbulence and Combustion, vol. 99 (n° 1). pp. 173-184. ISSN
1386-6184

Mejia, Daniel and Bauerheim, Michaël and Xavier, Pradip and Ferret, Bernard and Selle,
Laurent and Poinso, Thierry Stabilization of a premixed laminar flame on a rotating
cylinder. (2017) Proceedings of the Combustion Institute, vol. 36 (n° 1). pp. 1447-1455.
ISSN 1540-7489

Poinso, Thierry Prediction and control of combustion instabilities in real engines. (2017)
Proceedings of the Combustion Institute, vol. 36 (n° 1). pp. 1-28. ISSN 1540-7489

Urbano, Annafederica and Douasbin, Quentin and Selle, Laurent and Staffelbach, Gabriel
and Cuenot, Bénédicte and Schmitt, Thomas and Ducruix, Sébastien and Candel, Sébastien
Study of flame response to transverse acoustic modes from the LES of a 42-injector rocket
engine. (2017) Proceedings of the Combustion Institute, vol. 36 (n° 2). pp. 2633-2639.
ISSN 1540-7489

Urbano, Annafederica and Selle, Laurent Driving and damping mechanisms for transverse
combustion instabilities in liquid rocket engines. (2017) Journal of Fluid Mechanics, vol.
820. pp. 820 R2/1-820 R2/12. ISSN 0022-1120

Xavier, Pradip and Ghani, Abdulla and Mejia, Daniel and Miguel-Brebion, Maxence and
Bauerheim, Michaël and Selle, Laurent and Poinso, Thierry Experimental and numerical
investigation of flames stabilised behind rotating cylinders: interaction of flames with a moving
wall. (2017) Journal of Fluid Mechanics, vol. 813. pp. 127-151. ISSN 0022-1120

Urbano, Annafederica and Selle, Laurent and Staffelbach, Gabriel and Cuenot, Bénédicte
and Schmitt, Thomas and Ducruix, Sébastien and Candel, Sébastien Exploration of
combustion instability triggering using Large Eddy Simulation of a multiple injector Liquid
Rocket Engine. (2016) Combustion and Flame, vol. 169. pp. 129-140. ISSN 0010-2180

Lapeyre, Corentin J. and Mazur, Marek and Scouflaire, Philippe and Richecoeur, Franck and
Ducruix, Sébastien and Poinso, Thierry Acoustically Induced Flashback in a Staged Swirl-

Stabilized Combustor. (2016) Flow Turbulence and Combustion, vol. 97 (289). pp. 1-18. ISSN 1386-6184

Mari, Raphaël and Cuenot, Bénédicte and Rocchi, Jean-Philippe and Selle, Laurent and Duchaine, Florent Effect of pressure on Hydrogen/Oxygen coupled flame-wall interaction. (2016) Combustion and Flame, vol. 168. pp. 409-419. ISSN 0010-2180

Mejia, Daniel and Miguel-Brebion, Maxence and Selle, Laurent On the experimental determination of growth and damping rates for combustion instabilities. (2016) Combustion and Flame, vol. 169. pp. 287-296. ISSN 0010-2180

Livebardon, Thomas and Moreau, Stéphane and Gicquel, Laurent Y.M. and Poinso, Thierry and Bouty, Eric Combining LES of combustion chamber and an actuator disk theory to predict combustion noise in a helicopter engine. (2016) Combustion and Flame, vol. 165. pp. 272-287. ISSN 0010-2180

Bauerheim, Michaël and Nicoud, Franck and Poinso, Thierry Progress in analytical methods to predict and control azimuthal combustion instability modes in annular chambers. (2016) Physics of Fluids, vol. 28 (n° 2). pp. 021303. ISSN 1070-6631

Ghani, Abdulla and Poinso, Thierry and Gicquel, Laurent Y.M. and Müller, Jens-Dominik LES Study of Transverse Acoustic Instabilities in a Swirled Kerosene/Air Combustion Chamber. (2016) Flow Turbulence and Combustion, vol. 96 (n. 1). pp. 207-226. ISSN 1386-6184

Kraus, Christian and Selle, Laurent and Poinso, Thierry and Arndt, Christoph M. and Bockhorn, Henning Influence of Heat Transfer and Material Temperature on Combustion Instabilities in a Swirl Burner. (2016) Journal Of Engineering For Gas Turbines And Power, vol. 139 (n° 5). pp. 051503/1-051503/10. ISSN 0742-4795

Courtine, Emilien and Selle, Laurent and Poinso, Thierry DNS of Intrinsic ThermoAcoustic modes in laminar premixed flames. Combustion and Flame, vol. 162 (n° 11). pp. 4331-4341. ISSN 0010-2180

Ghani, Abdulla and Poinso, Thierry and Gicquel, Laurent Y.M. and Staffelbach, Gabriel LES of longitudinal and transverse self-excited combustion instabilities in a bluff-body stabilized turbulent premixed flame. (2015) Combustion and Flame, vol.162 (n° 11). pp. 4075-4083. ISSN 00102180

Misdariis, Antony and Vermorel, Olivier and Poinso, Thierry LES of knocking in engines using dual heat transfer and two-step reduced schemes. (2015) Combustion and Flame, vol. 162 (n° 11). pp. 4304-4312. ISSN 00102180

Robert, Anthony and Richard, Stéphane and Colin, Olivier and Poinso, Thierry LES study of deflagration to detonation mechanisms in a downsized spark ignition engine. (2015) Combustion and Flame, vol.162 (n° 7). pp. 2788-2807. ISSN 0010-2180

Ruiz, Anthony M. and Lacaze, Guilhem and Oefelein, Joseph C. and Mari, Raphaël and Cuenot, Bénédicte and Selle, Laurent and Poinso, Thierry Numerical Benchmark for High-

Reynolds-Number Supercritical Flows with Large Density Gradients. (2015) AIAA Journal, vol. 54 (n° 5). pp. 1445-1460. ISSN 0001-1452

Bauerheim, Michaël and Nicoud, Franck and Poinso, Thierry Theoretical analysis of the mass balance equation through a flame at zero and non-zero Mach numbers. (2015) Combustion and Flame, vol. 162 (n° 1). pp. 60-67. ISSN 0010-2180

Bauerheim, Michaël and Cazalens, Michel and Poinso, Thierry A theoretical study of mean azimuthal flow and asymmetry effects on thermo-acoustic modes in annular combustors. (2015) Proceedings of the Combustion Institute, vol. 35 (n° 3). pp. 3219-3227. ISSN 1540-7489

Bauerheim, Michaël and Staffelbach, Gabriel and Worth, Nick A. and Dawson, James and Gicquel, Laurent Y.M. and Poinso, Thierry Sensitivity of LES-based harmonic flame response model for turbulent swirled flames and impact on the stability of azimuthal modes. (2015) Proceedings of the Combustion Institute, vol. 35 (n° 3). pp. 3355-3363. ISSN 1540-7489

Mejia, Daniel and Selle, Laurent and Bazile, Rudy and Poinso, Thierry Wall-temperature effects on flame response to acoustic oscillations. (2015) Proceedings of the Combustion Institute, vol. 35 (n° 3). pp. 3201-3208. ISSN 1540-7489

Misdariis, Antony and Vermorel, Olivier and Poinso, Thierry A methodology based on reduced schemes to compute autoignition and propagation in internal combustion engines. (2015) Proceedings of the Combustion Institute, vol. 35 (n° 3). pp. 3001-3008. ISSN 1540-7489

Bauerheim, Michaël and Salas, Pablo and Nicoud, Franck and Poinso, Thierry Symmetry breaking of azimuthal thermo-acoustic modes in annular cavities: a theoretical study. (2014) Journal of Fluid Mechanics, vol. 760. pp. 431-465. ISSN 0022-1120

Leyko, Matthieu and Duran, Ignacio and Moreau, Stéphane and Nicoud, Franck and Poinso, Thierry Simulation and modelling of the waves transmission and generation in a stator blade row in a combustion-noise framework. (2014) Journal of Sound and Vibration, vol. 333 (n° 23). pp. 6090-6106. ISSN 0022-460X

Duchaine, Florent and Boileau, Matthieu and Sommerer, Yannick and Poinso, Thierry Large Eddy Simulation of Flow and Heat Transfer Around Two Square Cylinders in a Tandem Arrangement. (2014) Journal of Heat Transfer, vol. 136 (n° 10). p. 101702. ISSN 0022-1481

Motheau, Emmanuel and Nicoud, Franck and Poinso, Thierry Mixed acoustic-entropy combustion instabilities in gas turbines. (2014) Journal of Fluid Mechanics, vol. 749. pp. 542-576. ISSN 0022-1120

Bauerheim, Michaël and Parmentier, Jean-François and Salas, Pablo and Nicoud, Franck and Poinso, Thierry An analytical model for azimuthal thermoacoustic modes in an annular chamber fed by an annular plenum. (2014) Combustion and Flame, vol. 161 (n° 5). pp. 1374-1389. ISSN 0010-2180

Masi, Enrica and Simonin, Olivier and Riber, Eleonore and Sierra Sánchez, Patricia and Gicquel, Laurent Y.M. Development of an algebraic-closure-based moment method for unsteady Eulerian simulations of particle-laden turbulent flows in very dilute regime. (2014) International Journal of Multiphase Flow, vol. 58. pp. 257-278. ISSN 0301-9322

Bonhomme, Adrien and Duchaine, Florent and Wang, Gaofeng and Selle, Laurent and Poinso, Thierry A parallel multidomain strategy to compute turbulent flows in fan-stirred closed vessels. (2014) Computers and Fluids, vol. 101. pp. 183-193. ISSN 0045-7930

Koupper, Charlie and Poinso, Thierry and Gicquel, Laurent Y.M. and Duchaine, Florent Compatibility of Characteristic Boundary Conditions with Radial Equilibrium in Turbomachinery Simulations. (2014) AIAA Journal, vol. 52 (n° 12). pp. 2829-2839. ISSN 0001-1452

Selle, Laurent and Blouquin, Rodolphe and Théron, Marie and Dorey, Luc-Henry and Schmid, Martin and Anderson, William Prediction and analysis of combustion instabilities in a model rocket engine. (2014) Journal of Propulsion and Power, vol. 30 (n° 4). pp. 978-990. ISSN 0748-4658