

This submission has two main authors:

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We do not yet know who will be the speaker if our submission happens to be accepted. If such is the case, please use the photo and details of Hervé Neau for publication on the conference website.

References associated to this work are:

- [1] Hervé Neau, Maxime Pigou, Pascal Fede, Renaud Ansart, Cyril Baudry, Nicolas Mérigoux, Jérôme Laviéville, Yvan Fournier, Nicolas Renon, Olivier Simonin, “Massively parallel numerical simulation using up to 36,000 CPU cores of an industrial-scale polydispersed reactive pressurized fluidized bed with a mesh of one billion cells”, Powder Technology 366, pages 906-924, April 2020, DOI: <https://doi.org/10.1016/j.powtec.2020.03.010>
- [2] Hervé Neau, Pascal Fede, Renaud Ansart, Olivier Simonin, Nicolas Renon, Pierrette Barbaresco, Cyril Baudry, Nicolas Mérigoux, “Massively Parallel Numerical Simulation of Hydrodynamics and Transfers in a Polydispersed Reactive Gas-Particle Fluidized Bed at Industrial Scale with a Very Fine Mesh, over One Billion of Cells”, Keynote at Fluidization XVI conference, Guilin, China, 2019
- [3] Hadrien Benoit, Renaud Ansart, Hervé Neau, Pablo Garcia Trinanes, Gilles Flamant, Olivier Simonin, “3D numerical simulation of upflow bubbling fluidized bed in opaque tube under high flux solar heating”, AIChE Journal, 2018, DOI: <https://doi.org/10.1002/aic.16218>
- [4] Ziad Hamidouche, Enrica Masi, Pascal Fede, Renaud Ansart, Hervé Neau, Mehrdji Hemati, Olivier Simonin, “Numerical Simulation of Multiphase Reactive Flows”, Advances in chemical engineering: Bridging Scales in Modelling and Simulation of Non-Reacting and Reacting Flows. Part I, Chapter 2, Volume Fifty-Two, 2018
- [5] Samuel Mer, Olivier Praud, Hervé Neau, Nicolas Mérigoux, Jacques Magnaudet, Véronique Roig, “The emptying of a bottle as a test case for assessing interfacial momentum exchange models for Euler-Euler simulations of multi-scale gas-liquid flows”, International Journal of Multiphase Flow (IJMF), Volume 106, Pages 109-124, September 2018
- [6] Lokman Bennani, Hervé Neau, Cyril Baudry, Jérôme Laviéville, Pascal Fede, Olivier Simonin, “Numerical Simulation of Unsteady Dense Granular Flows with Rotating Geometries”, Chem. Eng. Research and Design, Volume 120, pages 333-347, April 2017
- [7] Hervé Neau, Jérôme Laviéville, Olivier Simonin, "NEPTUNE\_CFD High Parallel Computing Performances for Particle-Laden Reactive Flows", ICMF, 2010