

## List of publications

### Impacted journals

- [1] J. Velechovsky, J. Breil, and R. Liska. Flux corrected remapping using piecewise parabolic reconstruction for 2D cell-centered ALE methods. *International Journal for Numerical Methods in Fluids*, **76**:575–586, 2014.
- [2] J. Velechovsky, M. Kucharik, R. Liska, M. Shashkov, and P. Vachal. Symmetry- and essentially-bound-preserving flux-corrected remapping of momentum in staggered ALE hydrodynamics. *Journal of Computational Physics*, **255**:590–611, 2013.
- [3] J. Velechovsky, R. Liska, and M. Shashkov. High-order remapping with piece-wise parabolic reconstruction. *Computers and Fluids*, **83**:164–169, 2013.
- [4] O. Renner, M. Smid, T. Burian, L. Juha, J. Krasa, E. Krousky, I. Matulkova, J. Skala, A. Velyhan, R. Liska, J. Velechovsky, T. Pisarczyk, T. Chodukowski, O. Larroche, and J. Ullschmied. Environmental conditions in near-wall plasmas generated by impact of energetic particle fluxes. *High Energy Density Physics*, **9**(3):568–572, 2013.
- [5] Ph. Nicolai, M. Olazabal-Loume, S. Fujioka, A. Sunahara, N. Borisenko, S. Guskov, A. Orekov, M. Grech, G. Riazuelo, C. Labaune, J. Velechovsky, and V. Tikhonchuk. Experimental evidence of foam homogenization. *Physics of Plasmas*, **19**(11):113105:1–5, 2012.

### Others

- [6] J. Velechovsky, R. Liska, and V. Tikhonchuk. Arbitrary Lagrangian–Eulerian hydrodynamical method for laser plasma modeling. *Kudowa Summer School "Towards Fusion Energy" Programme and Contributions*, 61–62, Institute of Plasma Physics, Warsaw, 2014.
- [7] J. Velechovsky, M. Kucharik, R. Liska, and M. Shashkov. Symmetry-preserving momentum remap for ALE hydrodynamics. *Journal of Physics Conference Series (IUPAP-CCP 2012)*, **454**:012003:1–10, 2013.
- [8] J. Velechovsky, M. Kucharik, R. Liska, M. Shashkov, and P. Vachal. Symmetry-preserving Remap of Vectors for Staggered ALE Hydrodynamics. *Journee de l'Ecole Doctorale*, Universite de Bordeaux, 118, 2013.
- [9] O. Renner, J. Cihelka, L. Juha, J. Krasa, E. Krousky, J. Nejd, J. Skala, A. Velyhan, T. Pisarczyk, T. Chodukowski, Z. Kalinowska, A. Kasperczuk, P. Pisarczyk, R. Liska, M. Šmíd, P. Vachal, J. Velechovsky, and J. Ullschmied. Plasma Jets Production at Laser-Burnt-Through Foils and their Interaction with Secondary Targets. In *Proceedings of the 5th International Conference on Frontiers of Plasma Physics and Technology*, IAEA Vienna, 2013.
- [10] R. Liska, M. Kucharik, J. Limpouch, O. Renner, P. Vachal, L. Bednarik, and J. Velechovsky. ALE Method for Simulations of Laser-Produced Plasmas. In Fort, J and Furst, J and Halama, J and Herbin, R and Hubert, F, editor, *Finite Volumes for Complex Applications VI: Problems and Perspectives, vols 1 and 2*, volume 4 of *Springer Proceedings in Mathematics*, 857–873, Springer-Verlag Berlin, 2011.
- [11] H. Jelinkova, L. Bednarik, M. Drahokoupil, M. Duspiva, M. Fibrich, J. Havlik, M. Holec, M. Jelinek, O. Kitzler, J. Kodet, P. Koranda, P. Matlas, V. Michalek, P. Navratil, M. Nemeč, D. Vyhlidal, P. Sztokowski, M. Vacek, J. Velechovsky, J. Blazej, M. Cech, V. Kubeček, M. Kucharik, R. Liska, A. Novotny, I. Prochazka, M. Sinor, J. Sulc, and P. Vachal. Lasery a aplikace. In *Workshop 2011*, number SGS10/299/OHK4/3T/14, pages 1–6. Czech Technical University in Prague, 2011.
- [12] O. Renner, J. Cihelka, L. Juha, E. Krousky, J. Nejd, J. Skala, A. Velyhan, T. Pisarczyk, T. Chodukowski, P. Pisarczyk, R. Liska, M. Smid, P. Vachal, J. Velechovsky, J. Ullschmied, O. Larroche, and E. Dalimier. Spectroscopic diagnosis of energetic plasma jets interaction with walls. In *14th International Workshop on Radiative Properties of Hot Dense Matter*, Universidad Politecnica de Madrid, 20, 2010.