

Listă de lucrări

Titlul tezei de doctoral: Adjoint-Based Optimization of Multiphase Flows With Sharp Interfaces.

Articole publicate

- [1] **A. Fikl**, D. J. Bodony, *Adjoint-Based Interfacial Control of Viscous Drops*, Journal of Fluid Mechanics, vol. 911, 2021.
<https://dx.doi.org/10.1017/jfm.2020.1013>
- [2] **A. Fikl**, D. J. Bodony, *Jump Relations of Certain Hypersingular Stokes Kernels on Regular Surfaces*, SIAM Journal on Applied Mathematics, vol. 80, nr. 5, pp. 2226–2248, 2020.
<https://dx.doi.org/10.1137/19m1269804>
- [3] **A. Fikl**, V. Le Chenadec, T. Sayadi, *Control and Optimization of Interfacial Flows Using Adjoint-Based Techniques*, Fluids, vol. 5, nr. 3, pp. 156–156, 2020.
<https://dx.doi.org/10.3390/fluids5030156>

Articole trimise spre publicare

- [1] L. X. Vu, **A. Fikl**, D. Bodony, O. Desjardins, *An Adjoint Method for Control of Liquid-Gas Flows Using a Sharp Interface Model*, SSRN Electronic Journal, 2022 (trimis la Journal of Computational Physics X).
<https://dx.doi.org/10.2139/ssrn.4213295>
- [2] **A. Fikl**, D. J. Bodony, *Adjoint-Based Control of Three Dimensional Stokes Droplets*, arXiv, 2022 (trimis la Journal of Computational Physics).
<https://arxiv.org/abs/2210.11916v1>

Conferințe

- [1] **A. Fikl**, D. J. Bodony, *Adjoint-Based Interfacial Control of Axisymmetric Viscous Drops*, ILASS-Americas, 2019.
<https://ilass.org/rdds/ResearchDataDetails.aspx?abstractId=1216>

- [2] L. X. Vu, **A. Fikl**, D. J. Bodony, O. Desjardins, *Adjoint-Based Optimal Control of an Air-Blasted Planar Sheet*, ILASS-Americas, 2019.
<https://ilass.org/rdds/ResearchDataDetails.aspx?abstractId=1230>
- [3] F. Drui, **A. Fikl**, P. Kestener, S. Kokh, A. Larat, V. Le Chenadec, M. Massot, *Experimenting With the P4est Library for AMR Simulations of Two-Phase Flows*, ESAIM: Proceedings and Surveys, vol. 53, pp. 232–247, 2016.
<https://dx.doi.org/10.1051/proc/201653014>
- [4] A. Baban, C. Bonchis, **A. Fikl**, F. Rosu, *Parallel Simulations for Fractional-Order Systems*, SYNASC, 2016.
<https://dx.doi.org/10.1109/synasc.2016.033>
- [5] **A. Fikl**, V. Le Chenadec, T. Sayadi, P. Schmid, *A Comprehensive Study of Adjoint-Based Optimization of Non-Linear Systems With Application to Burgers' Equation*, AIAA Aviation, 2016.
<https://dx.doi.org/10.2514/6.2016-3805>