



Contribution ID: 196

Type: **Poster (+) Presentation**

## Meshless Lattice Boltzmann Method for pore-scale porous media flow

*Wednesday, 2 June 2021 10:00 (1 hour)*

We will present our recent results on the development of semi-Lagrangian meshless Lattice Boltzmann method and its application to porous media flows. Our approach for meshless LBM will be similar to [1]. Here however we will operate on non-regular discretizations. Thus, it will be possible to easily refine discretization e.g. in narrow passages of pore-space. Results on velocity fields and results analysis will be presented.

### Time Block Preference

Time Block A (09:00-12:00 CET)

### References

[1] Lin, X., Wu, J., & Zhang, T. (2019). A mesh-free radial basis function-based semi-Lagrangian lattice Boltzmann method for incompressible flows. *International Journal for Numerical Methods in Fluids*, 91(4), 198–211. <https://doi.org/10.1002/flid.4749>

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