

# ONDŘEJ KINCL

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## EDUCATION

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Doctoral (ongoing) 2020-

- *Faculty of Mathematics and Physics, Charles University*
- *Thesis:* Numerical methods and mathematical modeling fit to non-equilibrium thermodynamics
- *Supervisor:* Michal Pavelka

Master 2018-2020

- *Faculty of Mathematics and Physics, Charles University*
- *Thesis:* Thermodynamic modeling of rolling fluid turbine
- *Supervisor:* Michal Pavelka

## PUBLICATIONS

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- Ondřej Kincl, David Schmoranzer, and Michal Pavelka. [Simulation of superfluid fountain effect using smoothed particle hydrodynamics](#). *Physics of Fluids* 35.4 (2023).
- Ondřej Kincl, and Michal Pavelka. [Globally time-reversible fluid simulations with smoothed particle hydrodynamics](#). *Computer Physics Communications* 284 (2023): 108593.
- Ondřej Kincl, et al. [Unified description of fluids and solids in Smoothed Particle Hydrodynamics](#). *Applied Mathematics and Computation* 439 (2023): 127579.
- Ondřej Kincl, et al. [Theoretical Analysis of Rolling Fluid Turbines](#). *SIAM Journal on Applied Mathematics* 82.1 (2022): 313-329.

## PROJECTS

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- SmoothedParticles.jl, <https://github.com/OndrejKincl/SmoothedParticles.jl>

## COMPUTER SKILLS

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Languages: Julia, C#, Python, HTML  
Frameworks: LaTeX, Fenics, GMSH, Git

## LANGUAGE SKILLS

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English (advanced), Czech (native), French (pre-intermediate)

## OTHER EXPERIENCE

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- Vice president of [SIAM Student Chapter Prague](#) (organization of educational activities for students)
- Internship in Trento, Italy (supervisor: Ilya Peshkov)
- Teaching tutorials of Mathematical Analysis at Charles University

last update: May 2023