

## List of publications

### Journal articles

- T. Ligurský, Z. Michalec: [On thermodynamically consistent coupling of the Barcelona Basic Model with a hydraulic model for unsaturated soils](#). Computers and Structures 285, 2023, 107082. [[preprint](#)]
- Z. Michalec, R. Blaheta, M. Hasal, T. Ligurský: [Fully coupled thermo-hydro-mechanical model with oversaturation and its validation to experimental data from FEBEX experiment](#). International Journal of Rock Mechanics and Mining Sciences 139, 2021, 104567. [[postprint](#)]
- S. Sysala, M. Čermák, T. Ligurský: [Subdifferential-based implicit return-mapping operators in Mohr-Coulomb plasticity](#). ZAMM - Z. Angew. Math. Mech. 97 (12), 2017, 1502–1523. [[postprint](#)]
- T. Ligurský, Y. Renard: [A method of piecewise-smooth numerical branching](#). ZAMM - Z. Angew. Math. Mech. 97(7), 2017, 815–827. [[postprint](#)]
- T. Ligurský, Y. Renard: [Bifurcations in piecewise-smooth steady-state problems: abstract study and application to plane contact problems with friction](#). Comput. Mech. 56(1), 2015, 39–62. [[postprint](#)]
- T. Ligurský, Y. Renard: [A continuation problem for computing solutions of discretised evolution problems with application to plane quasi-static contact problems with friction](#). Comput. Methods Appl. Mech. Engrg. 280, 2014, 222–262. [[postprint](#)]
- T. Ligurský: [Theoretical analysis of discrete contact problems with Coulomb friction](#). Appl. Math. 57(3), 2012, 263–295. [[postprint](#)]
- V. Janovský, T. Ligurský: [Computing non unique solutions of the Coulomb friction problem](#). Math. Comput. Simul. 82(10), 2012, 2047–2061. [[postprint](#)]
- J. Haslinger, V. Janovský, T. Ligurský: [Qualitative analysis of solutions to discrete static contact problems with Coulomb friction](#). Comput. Methods Appl. Mech. Engrg. 205–208, 2012, 149–161. [[postprint](#)]
- T. Ligurský, Y. Renard: [A Well-Posed Semi-Discretization of Elastodynamic Contact Problems With Friction](#). Q. Jl Mech. Appl. Math. 64(2), 2011, 215–238. [[postprint](#)]
- J. Haslinger, R. Kučera, T. Ligurský: [Qualitative analysis of 3D elastostatic contact problems with orthotropic Coulomb friction and solution-dependent coefficients of friction](#). J. Comput. Appl. Math. 235(12), 2011, 3464–3480. [[postprint](#)]
- T. Ligurský, J. Haslinger, R. Kučera: [Approximation and numerical realization of 3D contact problems with Coulomb friction and a solution-dependent coefficient of friction](#). Int. J. Numer. Meth. Engrg. 82(9), 2010, 1180–1206. [[postprint](#)]
- J. Haslinger, T. Ligurský: [Approximation and numerical realization of 3D contact problems with given friction and a coefficient of friction depending on the solution](#). Appl. Math. 54(5), 2009, 391–416. [[postprint](#)]

## Theses

- T. Ligurský: [Approximation, numerical realization and qualitative analysis of contact problems with friction](#). Ph.D. thesis, Faculty of Mathematics and Physics, Charles University in Prague, 2011.
- T. Ligurský: [Approximation and numerical realization of 3D contact problems with given friction and a coefficient of friction depending on the solution](#). Master's thesis, Faculty of Mathematics and Physics, Charles University in Prague, 2007.