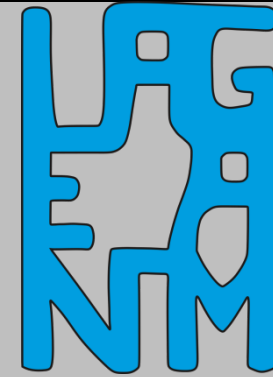


**2nd International Workshop on
the Finite Element Code LAGAMINE
(LAGASHOP 2018)**

31st January – 2nd February 2018
Delft University of Technology, Delft



Wednesday 31st January

Welcoming session

13h00-14h00

*Registration of participants and Welcome Coffee
at the PSOR cafe in the TU DELFT campus, CiTG Stevinweg 1*

LAGAMINE team

Wednesday 31st January

Multiphysical coupling (chairman: Benoit Pardoen)

14h00-14h10	<i>Welcome</i>	LAGAMINE team
14h10-14h30	<i>History of LAGAMINE</i>	R. Charlier
14h30-15h10	<i>Keynote lecture: Analysis of canister movements in an engineered barrier system</i>	L. Laloui
15h10-15h45	COFFEE BREAK	
15h45-16h10	<i>Numerical simulation with LAGAMINE for coupled THM mockup test under repository Relevant Loading Scenarios</i>	A. Rawat, W. Baille, F. Collin
16h10-16h35	<i>Coupled hydro-mechanical finite element modelling of rammed earth construction</i>	B. François, P. Gerard
16h35-17h00	<i>Bio-Chemo-Thermo-Hydro-Mechanical modelling of a municipal waste disposal</i>	F. Collin, B. Cerfontaine, J. Hubert
17h00-18h30	WELCOME COCKTAIL	

Thursday 1st February

Multiscale approaches and heterogeneities (chairman: Benjamin Cerfontaine)

09h00-09h40	<i>Keynote lecture: Multiscale modelling approaches in LAGAMINE: parallelisation strategies to mitigate the CPU cost issue</i>	J. Desrues
09h40-10h05	<i>Hydro-mechanical analysis of gas transport in compacted bentonite: uncertainty modelling</i>	A. Madaschi, L. Laloui
10h05-10h40	COFFEE BREAK	
10h40-11h05	<i>A fully coupled hydro-mechanical framework for swelling clays</i>	A.C. Dieudonné, R. Charlier
11h05-11h30	<i>FE2HM: multiscale modelling of hydromechanical coupling in LAGAMINE</i>	B. van den Eijnden
11h30-11h55	<i>Accounting for microstructure heterogeneity of clay rocks in a hydro-mechanical double scale model</i>	B. Pardoën, P. Bésuelle, J. Desrues, S. Dal Pont, P. Cosenza
12h00-14h00	LUNCH	
Localisation and discontinuities (chairman: Bram van den Eijnden)		
14h00-14h40	<i>Keynote lecture: Modelling strain localisation with LAGAMINE: evolution of the EDZ properties in a geological nuclear waste disposal</i>	F. Collin
14h40-15h05	<i>Hydro-mechanical study of MAVL nuclear waste repository galleries in Callovo-Oxfordian claystone</i>	A. Argilaga, R. Charlier, B. Cerfontaine, M.N. Vu, F. Collin
15h05-15h40	COFFEE BREAK	
15h40-16h05	<i>Modelling of the vertical and lateral loading of bucket foundations in sand using hydro-mechanical interface elements</i>	B. Cerfontaine, R. Charlier, F. Collin
16h05-16h30	<i>Effect of desiccation cracking on the fluid transfer process in agricultural soil</i>	D.K. Tran, R. Charlier, B. Mercatoris, A. Léonard, D. Toye, A. Degré
16h30-16h55	<i>Modelling with interface elements of the permeability alteration of coal due to sorption</i>	F. Bertrand, O. Buzzi, B. Cerfontaine, F. Collin
17h10-18h30	Visit of the experimental facilities of the Department of Geoscience & Engineering	
20h00	CONFERENCE DINNER (ROSSIO Restaurant, Oude Delft 78)	

Friday 2nd February

Applications and computational strategies (chairman: Stefano Muraro)

09h00-09h40	<i>Keynote lecture: A novel Timoshenko beam finite element with embedded discontinuities to simulate the behaviour of reinforced concrete structures till failure</i>	P. Kotronis
09h40-10h05	<i>Clay-support interactions for geological radioactive waste disposal</i>	P. Gerard, J. Nève, S. Levasseur, A. Dizier, B. François
10h05-10h40	COFFEE BREAK	
10h40-11h05	<i>Numerical approximation of one-phase and two-phase flow in unsaturated soils</i>	C. Jommi
11h05-11h30	<i>Modelling energy piles under cyclic thermal loading</i>	A. Di Donna, L. Laloui
11h30-11h55	<i>Formulation of a 1D finite element of Borehole Heat Exchanger (BHE) for accurate short-time and long-time effects modelling</i>	B. Cerfontaine, G. Radioti, R. Charlier
11h55-12h10	CLOSURE	