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ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

ENAC-SIE, Master Project, Fall 2018	Start:	18/09/2018
30 ECTS credits	End:	21/12/2018 (approx.)

Title	**Modeling the age of water across a range of Swiss catchments**
Supervisors	Doct. Paolo Benettin, Prof. Andrea Rinaldo
Objective	Use a large isotopic dataset to infer the age of streamflow in a range of Swiss catchments .
Abstract	Isotopic tracers are naturally present in precipitation and are extremely useful to reconstruct the age of the water that flows in rivers. In the last years, many efforts have been put to build a comprehensive hydrologic and isotopic dataset that includes more than 20 Swiss catchments at different locations. This dataset can now be used to understand and model the age of water at these sites.
Task description	1. data-analysis and comparisons across the different sites 2. model setup 3. model calibration at the different sites 4. analysis of model results
Required skills	• Matlab programming • interest in catchment-scale solute transport processes
Location	EPFL campus, Lausanne (CH)
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