



**Supervisor:**

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## MASTER'S THESIS

**TITLE:** RAINFALL-RUNOFF MODELLING IN A MESO-SCALE CATCHMENT

**TIME PERIOD:** DO BE DISCUSSED

**LANGUAGE:** ENGLISH OR GERMAN

### MOTIVATION AND AIMS OF THE STUDY

The hydrological research basin Pöllau was established in 1979. Since the beginning various hydro-meteorological variables have been recorded. In two earlier works rainfall-runoff models were parameterized for the catchment with varying success. The two models applied were HEC-HMS and BlueM.

The aim of this work is to first identify a proper model structure that allows to replicate the hydrological processes in the catchment. Thereafter a thorough analysis of the two existing models is to be conducted to understand the shortcomings and reasons, why the model performance was not satisfactory.

In the final step a rainfall-runoff model will be parameterized to the catchment. This final model can, depending on the results of the earlier model analysis, be based on either BlueM or HEC-HMS or utilize a different, more suitable simulation platform.