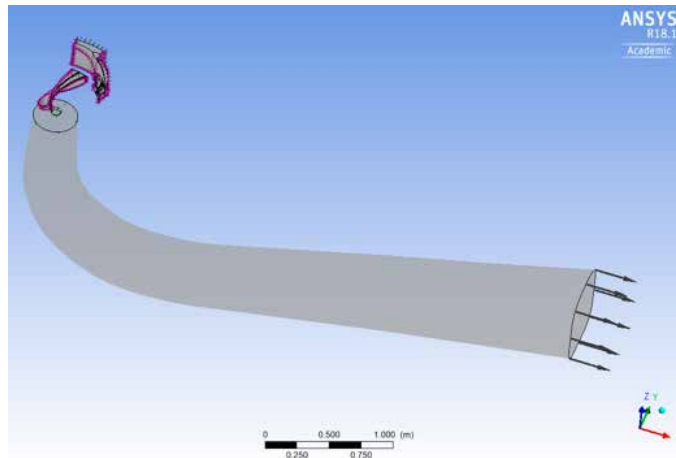
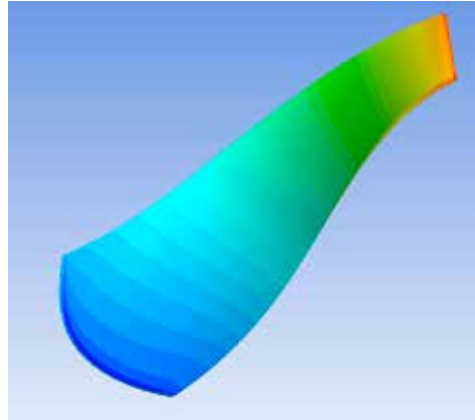


Background

A more diversified energy market leads to a desire of extending the operational range of hydraulic turbines. At off-design conditions cavitation can be a limiting factor.

The objective of this master thesis is to perform numerical simulations on a model of a Francis runner at full load in order to investigate if full load trailing edge cavitation can be predicted. Additionally, numerical simulations shall be performed at deep part load to see if inter-blade vortex cavitation can be predicted. The simulations will be done using ANSYS CFX.



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Spring 2018

**Investigation of
on-set of trailing edge
cavitation in a Francis
runner**

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