12th MEFT Student Workshop



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Thermal channel implementation at FISSIONIST

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FISSIONIST is a low-power nuclear reactor simulator designed to replicate the operational conditions of the Reactor Português de Investigação (RPI). It will be used for the training of nuclear engineering students by providing a safe and realistic simulation of reactor dynamics.

In this project, the new cooling circuits module will be developed, incorporating the reading of control commands, the simulation of water flow rate and temperature in critical points of the primary and secondary circuits, and the corresponding detector outputs. A basic simulation of the primary circuit flow has been done using Python, and communication with a Digital-to-Analog Converter has been successfully tested.

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