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## **vBambus: a multiplexing backend for the Panda virtual Instrument**

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At the cold triple axis instrument PANDA, a virtual twin based on Monte-Carlo ray-tracing simulations is used for educational purposes in student practical, training of newly arrived staff and experiment planning for users. The underlying McStas simulation is connected to the NICOS instrument control software, giving the virtual twin the look and feel of the real instrument. Also, instrumental properties like the resolution are accurately reproduced. Furthermore, at PANDA the multiplexing backend BAMBUS is waiting for its first neutrons. Here we report the implementation of BAMBUS with its 100 analysers and detectors into the virtual twin experiment. For this purposes, the McStas instrument file is created using a python script. The compiled virtual instrument is then connected to Nicos. Using a simple virtual sample, the data reduction using the Mjolnir software package can already be tested without neutrons.

**Primary authors:** LÖSCH, Augustin; Mr BAUER, Lukas (Jülich Forschungszentrum GmbH)

**Co-authors:** SCHNEIDEWIND, Astrid; FRANZ, Christian

**Presenters:** LÖSCH, Augustin; Mr BAUER, Lukas (Jülich Forschungszentrum GmbH)

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