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New developments in the McStas neutron Monte Carlo ray-tracing package

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The McStas neutron ray-tracing simulation package is a versatile tool for producing accurate simulations of neutron scattering instruments at reactors, short- and long-pulsed spallation sources such as the European Spallation Source. McStas It is extensively used for design and optimization of instruments, virtual experiments, data analysis and user training. McStas was founded as an scientific, open-source collaborative code in 1997.

This contribution presents the project at its current state and gives an overview of main new developments in McStas 2.5 (December 2018) and the forthcoming 2.6 and 3.0 releases, including a revised code generator and dawning support for execution on GPU processors.

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