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Atmospheric neutrino detection efficiency estimation in the NOvA experiment.

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The NOvA experiment aims to study neutrino oscillation parameters using an accelerator complex. Far detector big size and high segmentation structure as well as a flexible system of software triggers and data acquisition allows to detect the atmospheric neutrinos and study their parameters in NOvA.

This work presents the developed technique of atmospheric neutrinos registration in the far detector: the selection and reconstruction of triggers, the calculation of their efficiency for background and signal events, and finally the expected energy spectrum of atmospheric neutrinos.

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