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Design study on the Super Baikal detector

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Abstract. We have a plan to construct one cubic kilometer detector for high and extremely high energy neutrinos in the lake Baikal, called as the Super Baikal Detector, where only we can consider such a detector as a real one. We have made simulation calculations on the Cherenkov lights from both high energy electron neutrinos and muon neutrinos for the Super Baikal Detector, and studied on the determination of incident directions and energies for the detected particles.