

An efficient hit finding algorithm for Baikal-GVD muon reconstruction

Executive summary

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We present a novel noise suppression approach for Baikal-GVD based on the ScanFit technique used in ANTARES. The new approach utilizes graph theory know-how to improve on the base algorithm. The new approach is used in the new muon track reconstruction pipeline and resulted in an almost two-fold increase in efficiency. The new approach has also been tested with high energy and multicluster Monte-Carlo samples with satisfactory results.