Performance of PCA in PADC Detector Analysis for Fast Neutron Measurement

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Abstract. Precise detection of fast neutrons, connected with the minimization of the uncertainty of the measurement, is a field extensively studied for several decades. The study presented focuses on the detection of fast neutrons using passive Solid-state nuclear track detectors of poly-allil diglycol carbonate. The analysis of the detectors was performed using TASLImage system, which is compared to the data processing using the method of Principal component analysis.