



Contribution ID: 4

Type: **not specified**

## **Bayes-Tracking - A novel Approach to Gamma-ray Tracking**

A new type of Gamma-Ray Tracking algorithm based on Bayesian inference is presented. The mathematical foundation of this novel algorithm, Bayes-Tracking, is outlined with emphasis on the advantage of being able to include Compton-escaped photons. A first performance test is presented. A gain in Peak-to-Total ratio of the tracked spectrum compared to the untracked spectrum of the detector has been achieved.

**Primary author:** Mr NAPIRALLA, Philipp (IKP TU Darmstadt)

**Co-authors:** Dr STAHL, Christian (IKP TU Darmstadt); Prof. EGGER, Herbert (AG Numerik und wissenschaftliches Rechnen, TU Darmstadt); Mr REESE, Michael (AG-Pietralla, IKP, TU-Darmstadt); Prof. PIETRALLA, Norbert (TU Darmstadt); Dr JOHN, Philipp R. (IKP TU Darmstadt)

**Presenter:** Mr NAPIRALLA, Philipp (IKP TU Darmstadt)