

## **Pulse-shape analysis for temperature dependent scintillators**

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In this project, we have measured and studied the pulse shapes of signals originating from inorganic scintillators coupled to Silicon Photomultipliers for a varying temperature. In particular, we performed measurements for CsI, NaI, CeBr<sub>3</sub> and CLYC scintillating crystals. The measurements took place inside a controlled atmosphere station that allowed handling of the bare hygroscopic crystals. The temperature was controlled by Peltier element. The analysis was carried out using a simple pulse shape analysis method based on the ratio of two different integration regions. The results show that in most cases this simple method is adequate to capture the change in the signal pulse shapes caused by the temperature changes.

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