

# KAGRA detector characterization

# Project description



Development of the multi-channel analysis for noise-source identification

## **Aim**

To develop a system to localize noise sources (to help quick commissioning).

## **Background**

~10000 physics and environmental monitors(PEMs) will be installed around KAGRA in order to know what happen in/around KAGRA. The PEM data are digitized and stored in channels on the EPICS system. The data are available for the characterization by accessing the channels.

In commissioning stage, one of important tasks to make KAGRA reach its design sensitivity is the *noise hunting*. It's critical to have a systematic approach for noise hunting.

The detector characterization team will provide such a system.

We focus on multivariate analysis