

Contribution ID: 358 Type: Poster

A Community Material Assay Database

The physics community possesses a wealth of knowledge on the radiopurity of materials, which has been acquired laboriously during the design and construction of generations of ultra-low background experiments. To the extent that this information has been shared, it has been done so through databases of limited scope or availability, through publications and through informal exchanges. The aim of the Community Material Assay Database is to consolidate these data into a single comprehensive repository, in which the data is stored in a concise and flexible data format, and is accessible through a powerful web interface. This open-source database is built using the CouchDB NoSQL database engine. Assays are encoded and stored as JSON documents, and searched and edited using a client-side AJAX web application stored within the database itself. The software can also be used as a stand-alone application by experimental collaborations or counting facilities. The initial public release is accessible at http://radiopurity.org.

Primary author: Dr LOACH, James (Shanghai Jiao Tong University)

Co-authors: POON, Alan (LBNL); Prof. COOLEY, Jodi (SMU)

Presenter: Dr LOACH, James (Shanghai Jiao Tong University)

Track Classification: Neutrinoless Double Beta Decay