

Dear Colleagues,

We are pleased to invite you to participate in the Low Radioactivity Techniques 2022 Workshop (LRT 2022), which is being jointly hosted by South Dakota Mines and the Sanford Underground Research Facility, and takes place in Rapid City, South Dakota, United States. **Registration opened on February 15<sup>th</sup>, 2022.**

**Topics:**

- Underground laboratories
- Low background methods and counting techniques
- Cosmogenic background: experimental data and simulations
- Mitigation of radon background
- Mitigation of surface contamination background
- Crystal scintillators, radio-purity, crystal growth, and application to rare-event searches
- Liquid scintillator and water Cherenkov: radio-purity, purification methods
- Radio-purity assay and database
- Detectors with liquid noble gases for rare-event searches
- Bolometers for rare-event searches
- Semiconductor detector backgrounds, production
- Low background material production (including advanced machining and 3D printing)
- Particle background impacts on quantum information systems and quantum computing

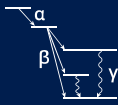
**Dates:** June 14-17, 2022

**Workshop Website:** <https://indico.sanfordlab.org/e/LRT2022>

**Location:** South Dakota Mines campus, 501 E. Saint Joseph Street, Rapid City, SD, USA

**Email:** lrt2022@sanfordlab.org

The Conference will have morning and afternoon sessions; no parallel sessions are planned. One poster session is scheduled.



**Abstract submission has closed.**

Poster session is scheduled on June 15<sup>th</sup>, 2022.

A book of selected submitted abstracts will be posted on the web page.

Authors of selected contributions have been informed. The workshop timetable is being finalized. Please email the workshop organizers at [Irt2022@sanfordlab.org](mailto:Irt2022@sanfordlab.org) if you have submitted an abstract but not heard whether it has been accepted.

**Registration**

Registration opened February 15<sup>th</sup>, 2022

Registration fee: \$400 USD, deadline May 13<sup>th</sup>

Late registration fee: \$450 USD

Payments may be made by credit card through the registration webpage link.

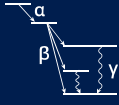
Registration fee covers the scientific program, proceedings, lunches, snacks, SURF tour, sightseeing tours, bus transportation, and banquet. More details can be found on the web page.

**Accommodations**

Rapid City has a large tourist industry and so has plenty of hotels, restaurants, and bars. The beautiful Black Hills area has many opportunities for outdoor enthusiasts, including hiking and mountain biking as well as a host of natural wonders. Details on accommodations and special rates are available on the Indico webpage under "Accommodations."

**Travel**

Rapid City has a regional airport (RAP), serviced by American, Delta, and United airlines, from Dallas, Denver, Minneapolis, Salt Lake City, and Chicago. The airport is a 15-minute drive from campus. Many area hotels, including those with room blocks for the conference, have shuttles to/from the airport and/or use Rapid Ride as an airport shuttle. We also plan to run vans between the airport and the dorms for people staying on campus. We will run buses between the hotels with room blocks and campus each morning and evening, and Lyft is available in Rapid City. Participants should be able to avoid renting cars if they would like to, but they are available at the Rapid City Airport if desired.



# 2022

WORKSHOP VIII

June 14-17, 2022

SOUTH DAKOTA MINES CAMPUS, RAPID CITY, SD



### Social events

Excursions are planned during the Conference, including tours to the Sanford Underground Research Facility, Mount Rushmore/Crazy Horse, and the Badlands.

We are looking forward to seeing you at LRT 2022.

Best regards,  
The SAC and LOC