



Contribution ID: 549

Type: **Poster**

## **Manipulating stored energy in NaI(Tl) and DAMA-LIBRA background modulation**

*Monday 28 August 2023 19:37 (1 minute)*

Excess energy stored in NaI(Tl) crystals can cause spontaneous luminescence, and exposure to red light can release thermally induced luminescence. We can assume that stored energy can spontaneously be transformed into heat. We know that energetic particles can produce energy-storing states, and we can assume that interactions with practice can release stored energy either as luminescence or heat. Environmental factors also can affect the accumulation and release of stored energy. We discussed several scenarios of how these effects can lead to background luminescence modulations. This work was performed under the auspices of the U.S. Department of Energy by Lawrence Livermore National Laboratory under Contract DE-AC52-07NA27344. LLNL-CONF-849050.

### **Submitted on behalf of a Collaboration?**

No

**Primary author:** PEREVERZEV, sergey (LLNL)

**Presenter:** PEREVERZEV, sergey (LLNL)

**Session Classification:** Poster session

**Track Classification:** Dark matter and its detection