



Contribution ID: 131

Type: **Talk**

## **Alessandro Razeto (LNGS, INFN, Italy): SiPM at cryogenic temperature for dark matter**

*Friday 23 February 2018 15:00 (15 minutes)*

DarkSide-20k is a 20 tonne fiducial mass liquid argon TPC that will perform an instrumental background-free search for WIMP dark matter. The TPC will be outfitted with more than 125,000 silicon photomultipliers (SiPM) grouped into 5210 single-channel, 25 cm<sup>2</sup> photosensors that are sensitive to single photoelectrons. We will present the performance of the photosensor and associated low-noise electronics at liquid argon temperature and discuss the strategy for scaling up production for DarkSide-20k.

**Presenter:** Dr RAZETO, Alessandro (LNGS, INFN, Italy)

**Session Classification:** Session 15