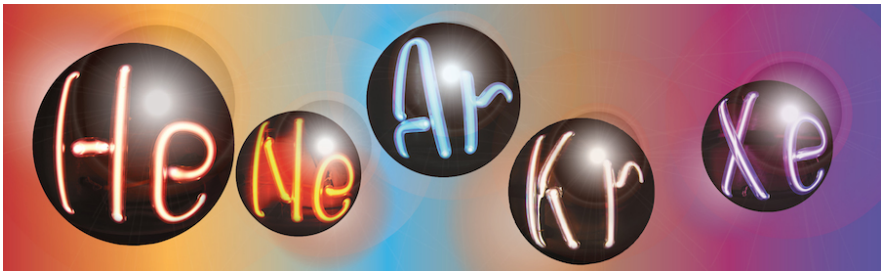

Contribution ID: **31** Type: **Presentation**

Radon Background in Liquid Xenon Detectors

Saturday, 23 September 2017 12:15 (15 minutes)

In many liquid xenon experiments the radioactive noble gas radon is an important background source. It emanates continuously from the detector materials and can reach the sensitive detection region. The successive decays of its daughter isotopes can mimic the signals from dark matter interactions. This talk focuses on measurement methods to determine the radon level before detector assembling, allowing a careful material selection. A few selected results will be shown. Furthermore, radon removal techniques will be presented to achieve a further background reduction.

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Session Classification: Saturday Morning 2

Track Classification: Signal reconstruction and identification (analysis methods, simulations)