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- Our e-poster presents a new approach to xenon measurements.
- First, I will explain why it is important to increase the sensitivity — or minimum detectable concentration (MDC) — of xenon monitoring. Current IMS and OSI systems often detect only Xe-133, while the other CTBT-relevant isotopes often remain below the sensitivity threshold.
- We combined a more than 50-year-old large-sample xenon collection method with our modern detector system and advanced sample preparation technology.
- The key result is that the MDC for Xe-133, Xe-135, Xe-133m, and Xe-131m is consistently below  $10^{-5}$  Bq/m<sup>3</sup>. This represents a significant improvement for the treaty verification regime.

If you are curious to learn more, please come and meet us at our poster.