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## **[339] AMS of $^{90}\text{Sr}$ at the sub-fg-level using laser photodetachment at VERA**

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$^{90}\text{Sr}$  is among the most hazardous fission products with a high production yield in the nuclear fuel cycle and is of great environmental interest due to its radiotoxicity as well as its potential as a tracer. Accelerator Mass Spectrometry (AMS) is the technique of choice for the detection of minute environmental levels of long-lived radionuclides, but the background from the abundant stable atomic isobar  $^{90}\text{Zr}$  has so far prevented its use for  $^{90}\text{Sr}$ . The novel Ion Laser InterAction Mass Spectrometry (ILIAMS) setup at the Vienna Environmental Research Accelerator (VERA) overcomes this problem by neutralizing the isobar via non-resonant laser photodetachment.

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