



Contribution ID: 93

Type: **not specified**

## **An Alp-Sized Neutron Absorber: Recent Discoveries and Measurements around Zirconium-88**

*Wednesday, 11 March 2026 17:50 (25 minutes)*

It was discovered in 2019 that the thermal neutron absorption cross section of zirconium-88 was roughly 800,000 barns when 10 barns was expected. This has set off a flurry of activity and interest in the nuclear community. This talk will describe the ongoing efforts to resolve this mystery. These activities include measurements of the metastable state of zirconium-89 at the University of Texas NETL reactor in April 2024, a search for the underlying neutron absorption resonance at the CERN neutron Time-Of-Flight (n\_TOF) experiment in August and September 2024, and spectroscopy of the neutron absorption at ILL FIPPS in August through October 2025.

**Presenter:** FLANAGAN, Will (University of Texas / University of Dallas)

**Session Classification:** session 10 (Chair: C. Simenel)