



Contribution ID: 73

Type: **Poster**

## The resonant neutron spin echo spectrometer RESEDA

*Wednesday, December 9, 2020 5:40 PM (20 minutes)*

The MIEZE (Modulation of Intensity with Zero Effort) technique is in essence a high-resolution spin echo time-of-flight technique. In contrast to classical neutron spin echo, all beam preparation and therefore all spin manipulation is done BEFORE the sample, opening up the possibility of introducing depolarizing conditions at the sample position. Therefore, magnetic or strongly incoherently scattering samples can easily be measured without loss of signal. Furthermore, it is possible to apply large magnetic fields at the sample position, making MIEZE an excellent tool for studying fluctuations at quantum phase transitions as well as other dynamic magnetic phenomena, such as the melting of superconducting vortex lattices. Several highlights of recent results utilizing measurements from RESEDA using the MIEZE technique will be presented.

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**Session Classification:** Joint poster session of MLZ User Meeting and DN2020

**Track Classification:** DN: Instrumentation