Axion Dark Matter eXperiment (ADMX) Data Quality Progress Report

4Q FY18

This project continued from its 2Q beginning in February, 2018. Leanne Duffy is the LANL PI for ADMX, simply referred to as the PI in this short report.

The PI participated in ADMX remote shifts, monitoring the health of the experiment on a weekly basis. The goal of the remote shifts performed in other time zones is to give an early warning to on-site staff of issues occurring with the experiment overnight.

The PI continued work with a student, Ram Shadashshivajois, and faculty, David Tanner, at the University of Florida, and William Wester of Fermilab, on the high-resolution data analysis. Code to read the data files was uploaded and modified to work on the Fermilab ADMX computing facilities, to enable efficient processing of the large number of data files involved. Examination of windowing functions was begun.