Investigations of Data Quality in LIGO Data, Techniques
BROOKE RANKINS, University of Mississippi — The existing data quality (DQ)
flag veto pipeline procedure used to categorize DQ flag channels and calculate their
associated metric attributes relies heavily on MATLAB scripts. The scripts have
been built upon each other ad-hoc as users have required new information, some-
times with limited documentation. We are restructuring the calculation process in
an object-oriented language, Python, for two primary purposes. The first is to al-
low users to retrieve specific isolated information without having to run the entire
pipeline. The second is to calculate additional summary statistics regarding DQ flag
interaction, which may prove useful in evaluating the effectiveness of the categoriza-
tion process. The nature of the Python vetopipeline code allows the addition of such
new features with greater simplicity. The presentation will detail the framework of
the Python vetopipeline, and introduce the DQ flag interaction statistics.

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