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Characterization of aliased noise in the Advanced ACTPol receiver

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Advanced ACTPol is the second generation polarization-sensitive upgrade to the 6m aperture Atacama Cosmology Telescope (ACT), which increased detector count and frequency coverage compared to the previous ACTPol receiver. Advanced ACTPol utilizes a new two-stage time-division multiplexing readout architecture based on superconducting quantum interference devices (SQUIDs) to achieve a multiplexing factor as high as 64 (rows) fielding a 2012 detector camera at 150/220 GHz and two 90/150 GHz cameras containing 1716 detectors each. We present the aliasing noise characteristics of the advanced ACTPol receiver as deployed.

Less than 5 years of experience since completion of Ph.D

Y

Student (Ph.D., M.Sc. or B.Sc.)

Y

Primary authors: Mr GALLARDO, Patricio (Cornell University); Prof. ACT COLLABORATION, The

Presenter: Mr GALLARDO, Patricio (Cornell University)

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