Contributed Talk

Splinter CCAT

CCAT-prime project overview

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CCAT-prime (CCAT-p) will be a 6-meter diameter telescope located at 5600 meters elevation on Cerro Chajnantor in the high Atacama Desert of northern Chile. Situated at a high, dry site and with a surface accuracy of better than 10 μm, CCAT-p will observe the sky at submillimeter to millimeter wavelengths. A novel "crossed-Dragone" optical design will deliver a high-throughput, wide-field-of-view telescope capable of illuminating more than 100,000 detectors enabling rapid mapping of large areas of the sky. The high site offers superb observing conditions, yielding routine access to the 350 μm window and improved performance at longer wavelengths.
A partnership of Cornell University, a consortium of German institutions led by the Universities of Cologne and Bonn, and a consortium of eight Canadian academic institutions are working together to create CCAT-p. Researchers at additional institutes in the U.S., Canada, Germany and Chile are involved in science planning and instrument development.
Deployment of the CCAT-p telescope and instrumentation on Cerro Chajnantor will also provide operational experience at high altitude, reducing risk for the future construction of a 25-meter class telescope at the same site.