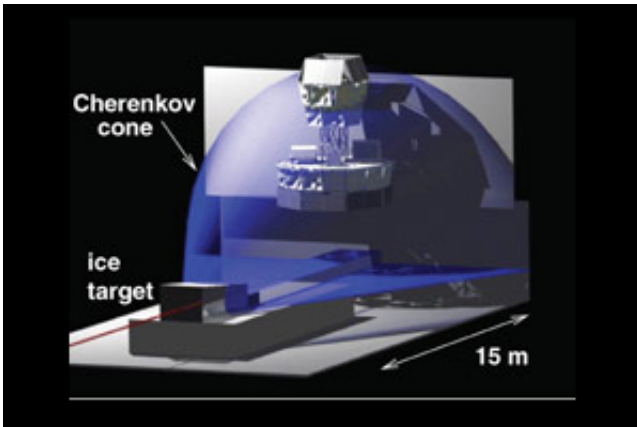


# ANITA is Back in Business

November 8 2007

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The ANITA probe visited SLAC in June 2006 for calibration tests using the accelerator beam and a block of ice.

The Antarctic Impulsive Transient Array (ANITA)—that plucky probe that visited SLAC last year before taking to the skies of Antarctica—is back in action.

Last month, a schematic of ANITA and the ice target used to calibrate its antennae made the cover of the October 26 edition of *Physical Review Letters*, and next year NASA plans to send her back for round two over the south pole.

According to SLAC physicist Pisin Chen, one of the investigators working with the ANITA team, the success of the original calibration experiments at SLAC in June of 2006 is proving how valuable particle

accelerators can be in the field of astrophysics.

"This is something SLAC should be proud of," Chen said. "Using a particle accelerator to study astrophysics is unique. The high-energy beam from SLAC's linac has such wonderful quality—it can be of great use to the astrophysics community."

ANITA was designed to circle Antarctica tethered to a high-altitude balloon at more than 100,000 feet searching for evidence of ultra-high energy cosmic neutrinos, which generate radio waves when they strike the ice. ANITA researchers brought the detector array to SLAC for calibration tests involving the linac and 10 tons of ice to simulate the Antarctic signals.

Source: by Brad Plummer, SLAC Today

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