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IceAct an Imaging Air Cherenkov Telescope upgrade for the IceCube Neutrino Observatory LARISSA PAUL, MATTHIAS PLUM, KAREN ANDEEN, Marquette Univ, ICECUBE COLLABORATION — IceAct is a proposed array of small and cost effective Imaging Air Cherenkov Telescopes situated at the IceCube Observatory at the South Pole. A single Imaging Air Cherenkov Telescope is capable of measuring the whole electromagnetic component of an air shower by measuring the Cherenkov light emitted within the atmosphere. This gives IceAct the unique opportunity to complement the coincident detection of air showers already capable with the IceCube Neutrino Observatory. Currently the electromagnetic footprint is measured by the surface array, IceTop, in coincidence with the high energetic muonic component measured by the in-ice detector, IceCube. Since January 2019, two prototype IceAct telescopes with 61 SiPM pixels apiece are taking data during the austral winter. These two telescopes provide the opportunity to study detector performance of Imaging Air Cherenkov Telescopes in the harsh conditions at the South Pole, and to study hybrid events with the existing detector components. We will present the current status and the future plans for this novel detector component.

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