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Cosmic Infrared Background and the High Altitude Water Cherenkov Observatory MICHAEL NEWBOLD, Univ of Utah, HAWC COLLABORATION¹ — The High Altitude Water Cherenkov Observatory (HAWC) is a detector situated at 4100 m a.s.l in Mexico. With a sensitivity to extensive air showers produced by either cosmic or gamma rays between 100 Gev and 100 TeV and a 2 sr instantaneous field of view, HAWC is an ideal sky survey instrument. A limiting factor in detecting gamma-ray sources at high redshifts is the interaction of the Extra-Galactic Background Light (EBL) with the signal photons. While the EBL attenuates the flux HAWC receives, it also provides a unique opportunity to set limits on the cosmic infrared background and to test exotic physics scenarios. In my talk I will discuss how the HAWC detector is uniquely suited to studying this phenomena and the prospects for placing limits.

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