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Askaryan Radio Array neutrino detector: status and design considerations for the future¹ RISHABH KHANDELWAL, MING-YUAN LU, AL-BRECHT KARLE, Univ of Wisconsin, Madison, ARA COLLABORATION — The Askaryan Radio Array is a large-scale ultra-high energy neutrino detector under construction in the deep, radio-transparent ice of the South Pole. To date, 5 ARA stations have been deployed and 3 have been operated over the last several years. The new stations feature a larger baseline an interferometric trigger string. We report on the science, design, and sensitivity of the experiment along with design considerations for a full-scale array.

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> Albrecht Karle Univ of Wisconsin, Madison

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