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UPDATE ON THE ALLEN TELESCOPE ARRAY AND THE SQUARE KILOMETER ARRAY

Jill Tarter SETI Institute 2035 Landings Drive Mountain View, CA 94043 USA Phone: +1-650-960-4555 FAX: +1-650-968-5830 Email: tarter@vger.seti.org

The SETI Institute and the University of California Radio Astronomy Lab are partnering to develop the technology to build a dedicated radio telescope array for SETI and radio astronomy. The ATA was described by Prof. William Welch at the 2000 IAC in Rio de Janeiro. The current paper presents an update on this fast paced project. The array will consist of 354 6-meter offset Gregorian antennas, with wideband log-periodic feeds, and InP MMIC low-noise amplifiers chilled by miniature pulse tube coolers. The first prototype antennas are expected to be delivered in October 2001. The SKA is an international project whose aim is to build an array with 100 times the collecting area of the ATA that works over the frequency range from 150 MHz to 20 GHz. In August 2000 representatives of 24 groups in 10 countries signed a memorandum of understanding to continue development on five different array concepts. The goal is to find a cost-effective way of solving the many technical challenges posed by this mammoth array. In 2005 a selection of one or more of these concepts and a suitable site will be made. Construction could start by the end of this decade.