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SEARCHING FOR ET WITH HELP FROM THREE MILLION VOLUNTEERS: THE
SETI@HOME, SERENDIP, SEVENDIP AND SPOCK SETI PROGRAMS

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We summarize results from two radio and two optical SETI programs
based at the University of California, Berkeley. We discuss the most
promising candidate signals from these searches and present plans for
future SETI searches, including SERENDIP V and SETI@home II.

The ongoing SERENDIP sky survey searches for radio signals at the 300
meter Arecibo Observatory. SERENDIP IV uses a 168 million channel
spectrum analyser and a dedicated receiver to take data 24 hours a
day, year round. The sky survey covers a 100 MHz band centered at
the 21 cm line (1420 MHz) and declinations from -2 to +38 degrees.

SETI@home uses desktop computers of 3.5 million volunteers to analyse
50 Terabytes of data taken at Arecibo. The SETI@home sky survey is
10 times more sensitive and searches a much wider variety of signal
types than SERENDIP IV but covers only a 2.5 MHz band. SETI@home is
the planet's largest supercomputer, averaging 25 Tflops. SETI@home
participants have contributed over a million years of computing time
so far.

The SEVENDIP optical pulse search looks for nS time scale pulses at
optical wavelengths. It utilizes an automated 30 inch telescope,
three ultra fast photo multiplier tubes and a coincidence detector.
The target list includes F,G,K and M stars, globular cluster and
galaxies.

The SPOCK optical SETI program searches for narrow band continuous
signals using spectra taken by Marcy and his colleagues in their
planet search at Keck observatory.