Perspectives on Cosmology and Astrophysics at Low Radio Frequencies

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A summary of the 2018 "Cosmology and Astrophysics at Low Frequencies" URSI-NRSM one-day session will be presented. Low frequency radio astronomy in the United States is currently carried out by multiple groups focusing on different technical, observational and algorithmic approaches, and increased communication and collaboration amongst these groups is highly desirable. Recent successes, ongoing instrument efforts and plans for the coming decade future will be presented. The scientific promise of current and planned low frequency radio astronomy efforts is considerable, addressing key topics at the forefront of modern astrophysics.

The instruments, techniques, algorithms and data arising from low frequency radio astronomy efforts have broader applications, including studies of radio frequency interference, antenna arrays, ionospheric science and planetary research (commissions B, E, G and H), and interest from those commissions in the session is anticipated.