Abstracts

Focal Plane Arrays for Millimeter-Wavelength Astronomy

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Arrays of detectors in the focal plane offer a major avenue for increasing the data rate of astronomical observations of extended sources. While having had only limited use at centimeter and longer wavelengths, focal plane arrays are being intensively developed for use on millimeter and submillimeter telescopes. In this review I discuss some of the general characteristics of focal plane imaging systems and associated optics. Detailed discussion is focused on the two large millimeter-wavelength focal plane arrays presently in operation: the 8 element 1.3 mm wavelength NRAO array on the 12 m telescope and the 15 element 3 mm wavelength array on the FCRAO 14 m antenna. Other systems and relevant technology presently under construction or in development phase are briefly described.

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