Measurements of the magnetic field geometry and strength in Bok globules

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ABSTRACT

In order to study the influence and structure of the magnetic field in the early phases of low-mass star formation, we obtained polarization maps of three Bok globules at 850 μm using the Submillimeter Common-User Bolometer Array (SCUBA) at the James Clerk Maxwell Telescope (JCMT). We observed the following sources: CB 26 - a globule with a nearly dispersed dense core containing a source with a circumstellar disk, CB 54 - a deeply embedded young stellar cluster, and DC 253-1.6 (CG 30) - a protostellar double core.