I-GALFA: The Inner-Galaxy ALFA Low-Latitude H I Survey

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The I-GALFA survey is mapping all the H I in the inner Galactic disk visible to the Arecibo 305m telescope within 10 degrees of the Galactic plane (longitudes of ℓ = 32° to 77° at b = 0°). The survey, which will obtain ~1.3 × 10⁶ independent spectra, became possible with the installation of the 7-beam Arecibo L-Band Feed Array (ALFA) receiver in 2004. ALFA’s 3/4 resolution and tremendous sensitivity offer a great opportunity to observe the fine details of H I in the Galaxy. The I-GALFA survey began in 2008 May and will be completed in 2009 September. Night observations between May and October are used for best spectral fidelity, allowing an RMS noise of ~0.25 K in 0.184 km s⁻¹ channels covering LSR velocities of −750 to +750 km s⁻¹. Details of the observing and data reduction can be found in Peek & Heiles (2008). The data will be made publicly available when the calibrated and gridded cubes are completed. Further information on the I-GALFA project may be found at www.naic.edu/~igalfa.

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References