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A Catalog Pipeline for Sources in the CTA Galactic Plane Survey

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The upcoming Cherenkov Telescope Array (CTA) will provide a significant improvement in both sensitivity and angular resolution compared to current generation imaging atmospheric Cherenkov telescopes. A key science goal of CTA is a survey of the entire Galactic plane. Outcomes of this survey include a census of Galactic gamma-ray source populations (SNR, PWNe, binaries, etc...), identifying possible PeVatron candidates, characterizing the diffuse Galactic gamma-ray emission and improving our knowledge of the origin of cosmic rays. However, in order to exploit the data for these purposes, an understanding of the underlying sources present in the survey data will be necessary. The Galactic plane survey presents many challenges including disentangling sources from underlying diffuse emission from galactic cosmic-rays and source confusion. This talk will describe current efforts to develop a pipeline for cataloging sources in CTA data built with the ctools analysis software. Specific focus will be given to the algorithms used for source detection and characterization in the anticipated CTA Galactic plane survey

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