Abstract Submitted
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Obtaining Dark Matter Distribution from the Milky Way's rotation curve ALEC HEWITT, PEARL SANDICK, University of Utah — Gaia offers a plethora of new data to explore. In this presentation we apply methods of galkin to a larger data set obtained from Gaia DR2, selecting stars within 100 pc of the galactic plane. This data set is further constrained to select stars with sufficiently circular velocities by requiring radial velocity to be small. The rotation curve is obtained, the baryonic component is subtracted off and modeled using RBR morphology. From this resulting curve we obtain parameters using NFW profile. These results agree with the compilation of 12 data sets called galkin12.

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