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# Galaxy peculiar velocities in the Zone of Avoidance

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## Abstract content <br>   (Max 300 words)

Dust extinction and stellar confusion of the Milky Way prevent the detection of galaxies at low Galactic latitude, creating the so-called Zone of Avoidance (ZoA). This has hampered our understanding of the local dynamics, cosmic flow fields and origin of the CMB dipole. For similar reasons, the ZoA was excluded from the so-called "whole-sky" Two Micron All-Sky Survey (2MASS) Tully-Fisher Survey (2MTF), which aims to provide distances and peculiar velocities for all bright inclined galaxies with a limit of K_s ≤ 11.25 mag in the 2MASS Redshift Survey (2MRS). Correspondingly, knowledge about the density distribution in the ZoA remains limited to statistical interpolations. We have pursued two different surveys to fill in the northern and southern ZoA. This data will for the first time allow a direct measurement of galaxy peculiar velocities. We have derived an optimized Tully-Fisher (T-F) template relation that will result in accurate measure of galaxy distances and flow fields in the ZoA. Derivation of the T-F template relation, magnitudes and biases corrections and preliminary results on flow fields in the southern ZoA will be presented.


## Apply to be<br> considered for a student <br>   award (Yes / No)?

Yes

## Level for award<br> (Hons, MSc, <br>   PhD)?

MSc

## Main supervisor (name and email)<br>and his / her institution

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## Would you like to <br> submit a short paper <br> for the Conference <br> Proceedings (Yes / No)?

Yes


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