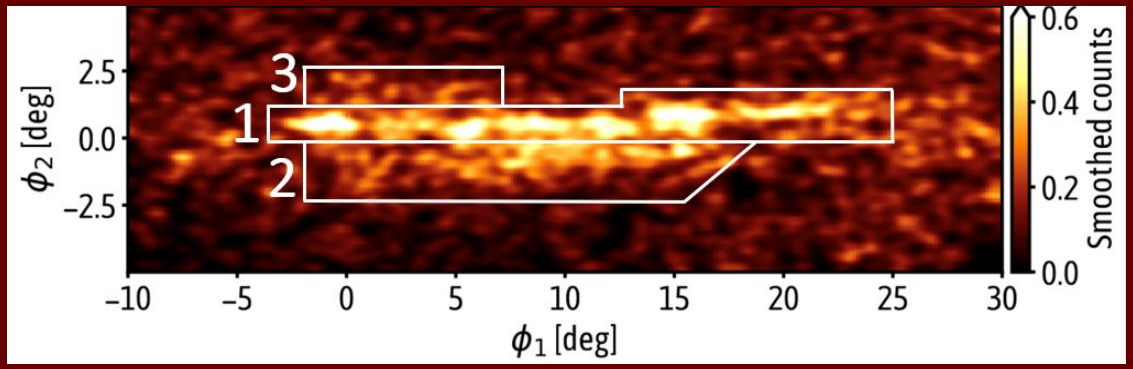
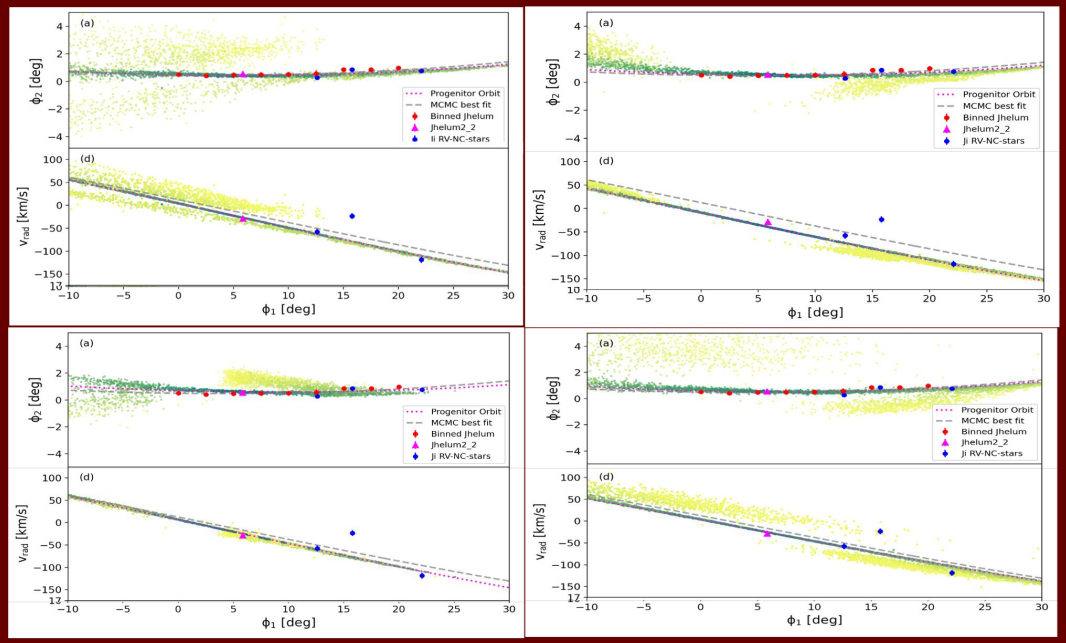
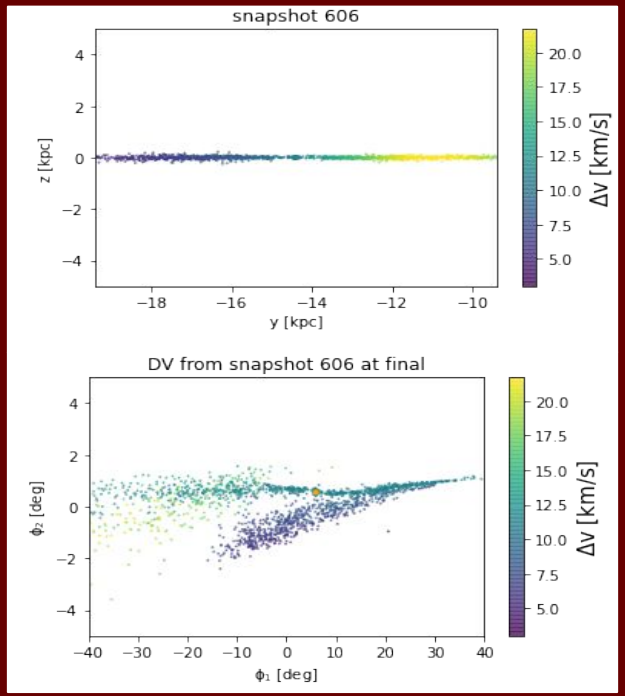
Milky Way Modelling with Stellar Streams: Jhelum



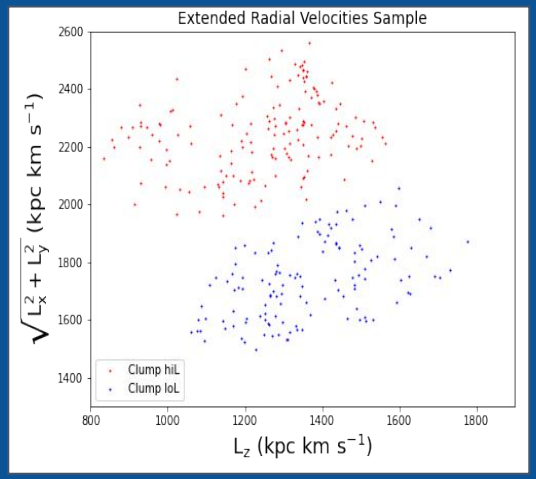
- Gaia eDR3 combined with DES
- Orbit fitting
- N-body simulations
- Velocity kick gradient due to interaction with Sagittarius

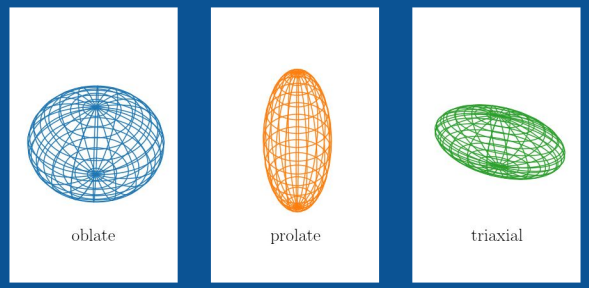




Orlin Koop with H.C. Woudenberg, E. Balbinot, A. Helmi
Contact: koop@astro.rug.nl
See also https://arxiv.org/abs/2202.02132

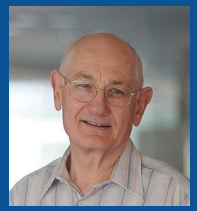
Milky Way Modelling with Stellar Streams: Helmi Streams



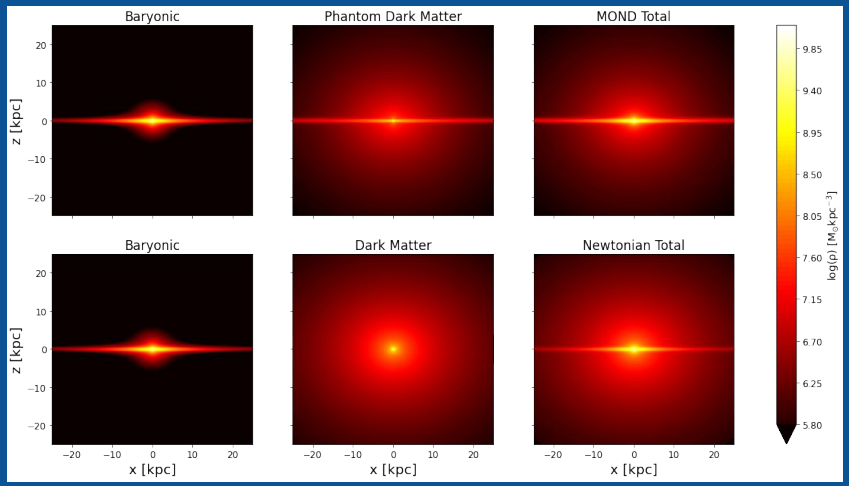


- Helmi streams show substructure in DR3 (Dodd et al. 2022a, 2022b)
- Need a prolate halo (q=1.2)
- MOND is alternative to Newtonian gravity
- Potential is constrained to follow shape of baryons.
- Can MOND explain the substructure? See my poster!

$$F_N = m\,\mu\left(\frac{a}{a_0}\right) a\,.$$



Mordehai Milgrom



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