

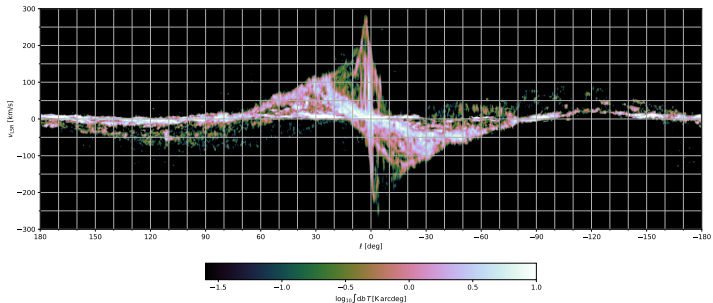
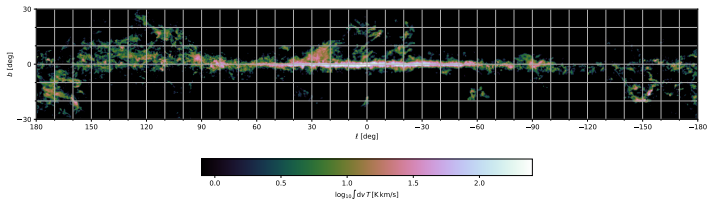
Bayesian inference of three-dimensional gas maps: Galactic CO

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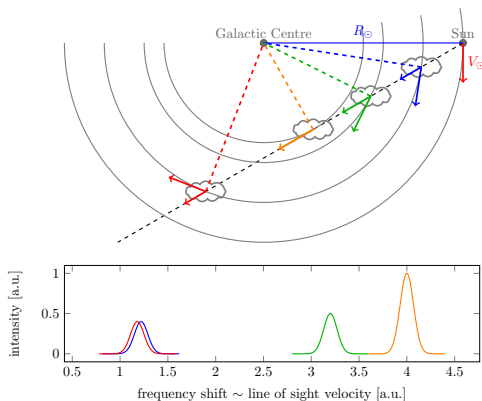
Molecular gas

- Modelling of γ -ray diffuse emission requires gas maps
- Molecular hydrogen (H_2) can be traced by carbon monoxide (CO)



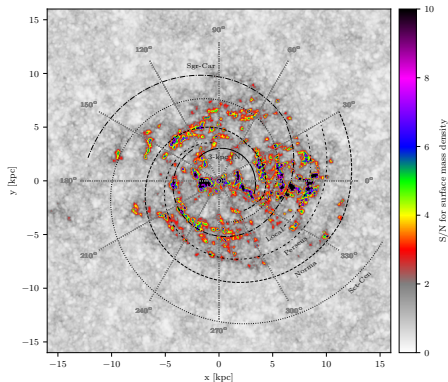
Kinematic deprojection

- Doppler shift can be used to get distance information



However, previous deprojections
suffered from artefacts!

Can leverage the power of correlations
to cure some issues of kinematic deprojection



I will ...

- 1 illustrate the issues with kinematic deprojection;
- 2 explain how the Bayesian method works;
- 3 show the results of our reconstruction.