Bayesian inference of three-dimensional gas maps: Galactic CO

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What is this contribution about?

Reconstruction of 3D maps of molecular hydrogen (H₂) from CO line surveys

Why is it relevant / interesting?

The 3D maps are needed for modelling of γ -ray diffuse emission, but suffer from artefacts.

What have we done?

We have performed a Bayesian reconstruction exploiting the correlated nature of the ISM.

What is the result?

3D maps of galactic H₂, complete with uncertainty information, available at this link!