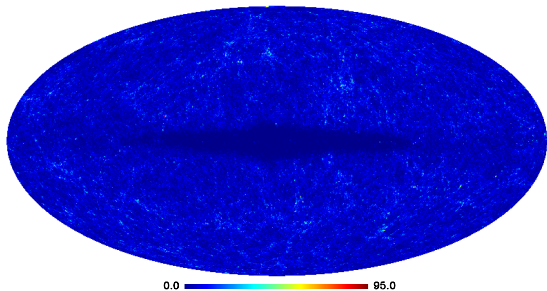


# Galaxy overdensity estimation: toward learning the missing data

François-Xavier Dupé and Jean-Luc Starck

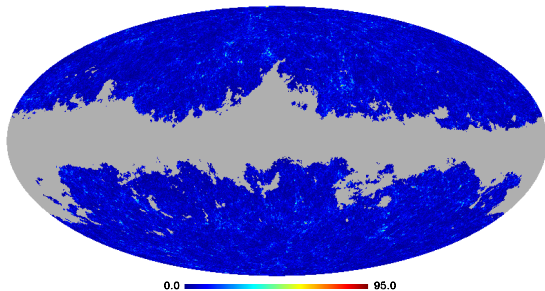
2MASS count map



# Galaxy overdensity estimation: toward learning the missing data

François-Xavier Dupé and Jean-Luc Starck

2MASS count map





## Outline of the method

**Problem:** estimating the galaxy overdensity using a noisy and incomplete observation.

**Proposed solution:** use a two-steps data augmentation scheme.

- *first step:* complete the observation using our knowledge about the distribution using multiple imputation.
- *second step:* estimate the overdensity using classical MAP framework and estimate useful parameters.

Nothing is really know about the convergence.