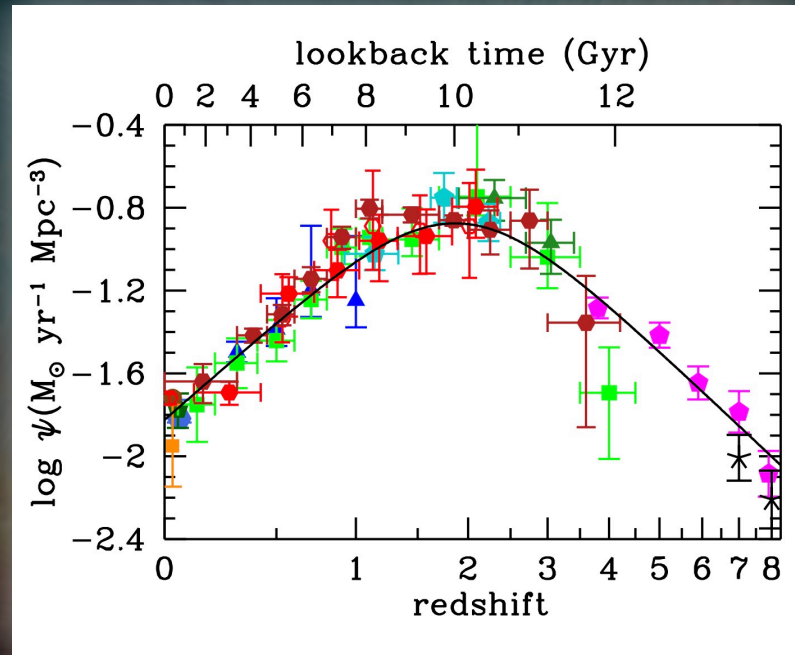


P23: Line emitter search with ALMA 3mm data

Problem:

Star formation rate evolution



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ALMA 3mm Data:

3 regions—

- SXDF-ALMA3
- SPT2344-4243
- PS1cgx

Area (arcmin ²)	4.3
Frequency (GHz)	84.1-114.9
$\sigma_{50\text{km/s}}$ (mJy/beam)	0.10-0.20

Method:

- Subtract the continuum components
- Normalize data cube to S/N cube
- Use **clumpfind** to identify clumps
- Line emitter candidate selection:
S/N > 5 &
S/N (positive) > S/N (Negative) &
 Δv (line width FWHM) > 30 km/s



Results:

Totally 12 line emitter candidates

Results:

Constraints on CO line luminosity functions

