

CMBP Galactic Science Working Group
Telecon Minutes: 9/20/17 4:00-5:00 EDT

Attendees: L. Fissel, B. Hensley, D. Chuss, I. Stephens, S. Clark, B. Burkhart, A. Lazarian

Question: Is the 666 GHz band also in jeopardy of going away? DC to check with Shaul, but we should consider science impact.

- Ian S. - has a reference for molecular clouds in Quadrant 1. Will send reference.
- Crucial parameters for diffuse ISM? What sensitivity do we need? Need an estimate for dust temperature, emissivity, col. Density (can we get this from Planck?) Susan to provide column density on 1' scales. Diffuse dust T expected to higher (15-20K?).
- Are there spatial scales that we would need to resolve in diffuse ISM that would be physically useful?
 - o A.L.- Important to cover various scales.
 - o S.C. 100-200 pc is dominant component of diffuse ISM. Match with Galf. 0.1 pc scale (4'). Sonic scale 0.01-.1 pc. Ambipolar diffusion scale is similar.
- Very diffuse ISM- polarization fraction expected (from Planck) >5-10 %.
- Closest object- edge of the local bubble (100 pc).
- What resolution can we get for polarization spectrum?
- Dust polarization spectrum science goals- can we quantify the loss of 666 and/or 799 GHz frequency bands. (BH to look into this and get back to us.)