Ability to detect thermal dust frequency decorrelation

Polarized Galactic Foregrounds SED
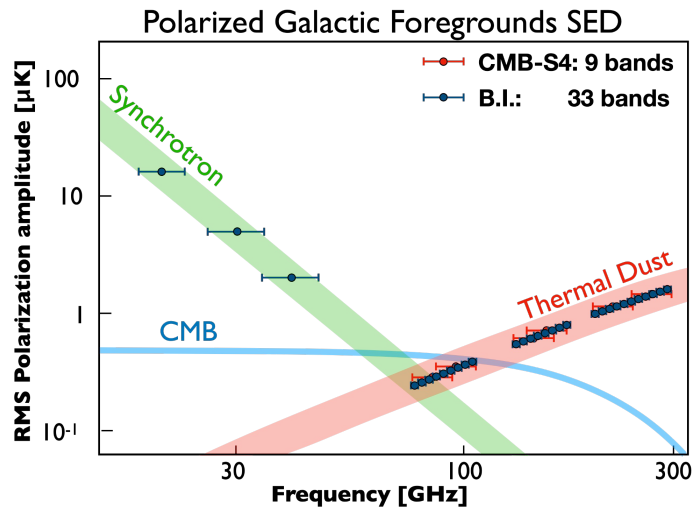
Corr_length = 15 : two times smaller than current upper-limit
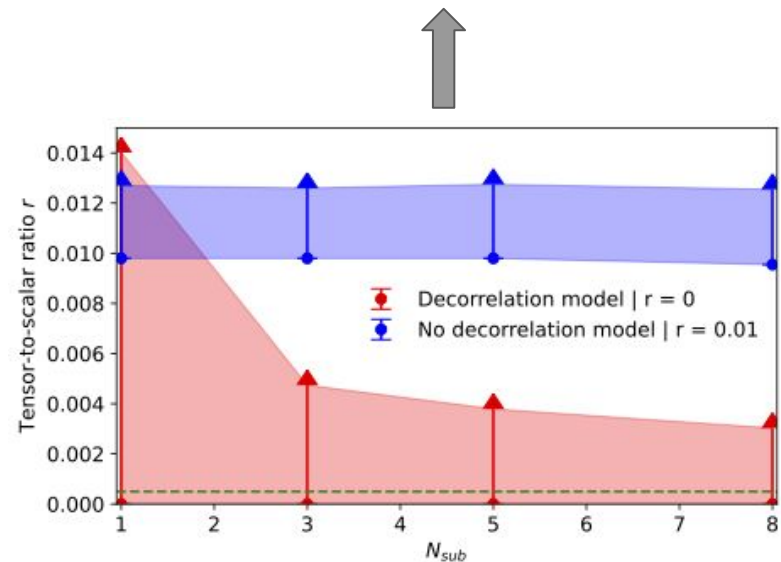
- *Simple thermal dust emission model is not sufficient*

- *Classical imager can not detect dust decorrelation*

- *BI is sensitive to frequency effect*

We need BI to complement classical imager data !

Paper A in preparation

Component Map-Making

The spectral information is inside the TOD, which leads to make components separation in time-domain.

$$\vec{d} = H \cdot \vec{c} + \vec{n}$$

- *Very powerful toolbox to fit components, systematic effets, instrumental parameters, etc …*

- *Can produce joint analysis with every experiments*