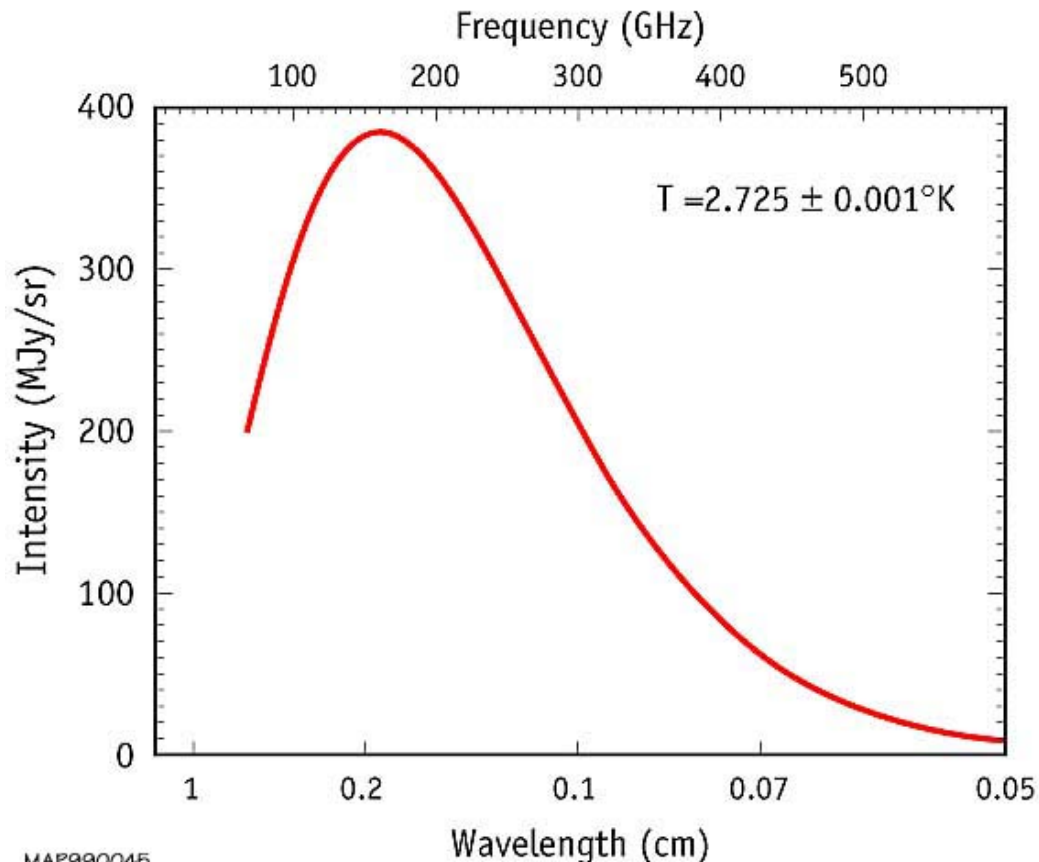


SPECTRUM OF THE COSMIC MICROWAVE BACKGROUND



MAP990045

Note: this is a plot of data (COBE) compared to theory. Error bars are too small to see.

We are bathed in black body radiation (CMBR).

Strong evidence that the Universe has been expanding and was formerly hot and dense.

The CMBR photons have been cooling as the Universe has expanded. They once were in thermal equilibrium with dissociated electrons and protons (i.e. when the Universe was hot enough). But as the Universe cooled, the electrons and protons combined to make atoms ($T \sim 10000\text{K}$) and the Universe became transparent to photons. They have been “free streaming” ever since.