

Conundrums concerning the Local Hot Bubble

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The discovery of the importance of solar-wind charge-exchange emission (SWCX) in the X-ray has produced an active debate about the existence of the Local Hot Bubble (LHB). Current evidence suggests that while the SWCX emission dominates the soft X-ray background at low Galactic latitudes the LHB dominates at high Galactic latitude. The SWCX contribution eases a number of LHB conundrums, though fundamental problems remain. Determining the amount of SWCX contribution to what was originally thought to be the LHB emission relies on modeling the solar wind and measuring (or calculating) a large amount of atomic data, a time consuming process. I will summarize our current understanding of the LHB with a particular emphasis on areas in which knowledge of the LHB may constrain the SWCX emission values.