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The Local Bubble in the interstellar medium and the origin of the low energy cosmic rays

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An analysis of the energy spectra of cosmic rays (CR) and particularly the precise data from the AMS-02 experiment leads us to propose that there is evidence to support our previous claim that the Local Bubble (LB) in the interstellar medium (ISM) is correct. It is suggested that the bulk of CR below about 100 GV come from the large number of supernova remnants (SNR) in the LB and responsible for it which appear to have occurred some 106 years ago. At higher rigidities the contribution from a 'Local Source', a single SNR generated some 105 years ago seems to dominate up to, at least 1 TV.

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