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KeV-ENA´s detectable by IBEX originating from regions inside the solar wind termination shock

Hans-Jörg Fahr
(hfahr@astro.uni-bonn.de) Argelander Institute for Astronomy, University of Bonn, Bonn, Germany

Anomalous cosmic ray ions up to an energy of about 10 MeV are generated by Fermi-1 acceleration processes operating in the region close to the solar wind termination shock. Due to their mobility these ions can diffuse inwards opposite to the solar wind flow direction, losing energy due to adiabatic cooling and finally when losing their mobility coupling back into the pick-up ion population which is co-convected outwards with the solar wind bulk. It is shown that this scenario in a consistent treatment leads to (-4)-velocity power laws in the ion energy range between 1 and 10 KeV. Thereby the spectral intensity of these ions is due to the injection rate operating at the shock surface. This rate strongly depends on the locally established magnetic tilt angle. All together this induces a complicated three-dimensional distribution of suprathermal KeV- ions. Here we shall study KeV-energetic ENA fluxes that are originating from this innerheliospheric ion distribution via charge exchange with interplanetary H-atoms. It turns out that ribbon count rates found by IBEX are well represented, whereas the ribbon geometry is less well represented.