

Erratum

Alfvén-wave transmission and test-particle acceleration in parallel relativistic shocks

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Key words. acceleration of particles – cosmic rays – galaxies: jets – relativity – shock waves – errata, addenda

Figures 8 and 9 in “Alfvén-wave transmission and test-particle acceleration in parallel relativistic shocks” by Vainio et al. (2003) were unfortunately produced by an erroneous plotting script. The correctly plotted figures are given here as Figs. 1 and 2, respectively. The difference of the erroneously and correctly plotted curves is not of qualitative nature and leads to no changes of the conclusions of Vainio et al. (2003).

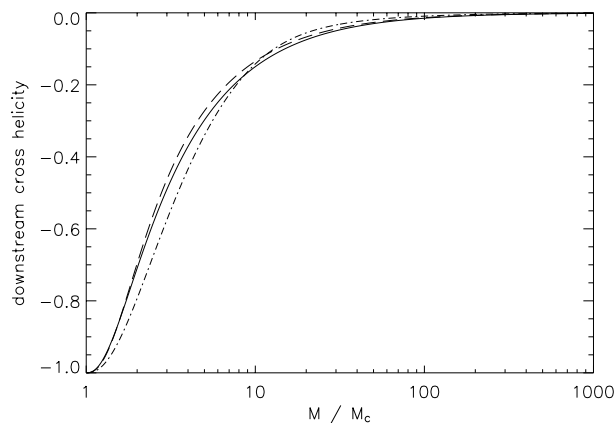


Fig. 1. Cross helicity of the Alfvén waves at constant wave number downstream a parallel shock wave for $u_1 = 0.1 c$ (solid curve, $r \approx 3.995$), $u_1 = 1.0 c$ (dashed curve, $r \approx 3.700$), and $u_1 = 10.0 c$ (dot-dashed curve, $r \approx 3.038$). The upstream cross helicity is taken to be zero, the spectral index of the waves is $s = 1.5$, and $M_c = \sqrt{r}$.

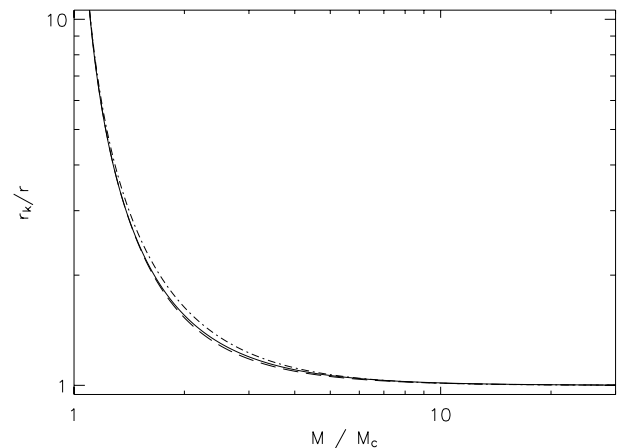


Fig. 2. Scattering center compression ratio, r_k , of a parallel shock wave for $u_1 = 0.1 c$ (solid curve, $r \approx 3.995$), $u_1 = 1.0 c$ (dashed curve, $r \approx 3.700$), and $u_1 = 10.0 c$ (dot-dashed curve, $r \approx 3.038$). The upstream cross helicity is taken to be zero, the spectral index of the waves is $s = 1.5$, and $M_c = \sqrt{r}$.

References

Vainio, R., Virtanen, J. J. P., & Schlickeiser, R. 2003, A&A, 409, 821