

Commentary

Unidirectional Beams

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Abstract

The unidirectional beams could be caused by a perpendicular magnetic field.

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Recently it has been commented that jet streams in the cosmos or even for that matter solar wind show a departure from the laws of physics in that there are streams perpendicular to the mainstream. As shown by the author, quite some time back such an effect could be caused by a perpendicular magnetic field. This is perhaps the explanation for these cosmic jet puzzles.

The author has been studying these unidirectional beams for some time and most recently in [1]. If the velocity of the beam is \vec{v} and the magnetic field is \vec{B} in a perpendicular direction then the net force on the beam would be $\sim \vec{v} \times \vec{B}$ which is perpendicular to the beam. This could explain the mystery.

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References

B.G. Sidharth (2019), Unidirectional Beams and the Virial Theorem, in *Twenty First Century Perspective of Spacetime* (Nova Science, New York).

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