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Lorentz symmetry breaking: monopole lensing BEN GUAN, MICHAEL SEIFERT, Connecticut College — If Lorentz symmetry is broken, then the speed of light can be variable throughout space. One way to accomplish this is via a hypothetical Lorentz-violating tensor field, which defines a preferred direction in spacetime. A monopole is a spherically symmetric configuration of this tensor field. As a light ray travels through this tensor field, it will either bend toward or away from the monopole due to the fact that speed of light is different at each point in space. We will present numerical results concerning the relationship between the deflection angle and the impact parameter for such light rays.

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