

Abstract Submitted
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Topological Lorentz Defects MICHAEL SEIFERT, Williams College
— Models in which a vector or tensor field takes on a non-zero vacuum expectation value have been a subject of great interest in recent years, particularly in the framework of the Standard Model Extension. Such models spontaneously break Lorentz symmetry, raising the possibility of topological defects arising via the Kibble mechanism. I present the results of recent work into the existence and properties of these solutions, particularly the monopole solutions that can arise when an antisymmetric two-tensor takes on a vacuum expectation value. These relic monopoles would in principle be observable either via their gravitational effects or via direct coupling to the Maxwell field.

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