A possible interaction between uncharged particles and the Electromagnetic field

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Maxwell Electrodynamics can be described either in Minkowski space-time or in a dynamically equivalent way in a curved geometry constructed in terms of the electromagnetic field. For this the field must have a superior bound limited by a maximum value of its energy. After showing such geometric equivalence we investigate the possibility that new processes dependent on the metric structure may appear. In particular for very high values of the field a direct coupling of uncharged particles to the electromagnetic field is predicted.