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**A six-dimensional Jordan model for electroweak interactions**

ALDO MARTÍNEZ MERINO<sup>1</sup>, OCTAVIO OBREGON, Universidad de Guanajuato — We present a model for the electroweak interactions based on the commutative but non-associative exceptional Jordan algebra of Hermitian matrices valued on the octonions. By this means, we propose a construction of a gauge theory which take values in this algebra. Following closely the six-dimensional model proposed by D. Fairlie years ago and using a supergroup, we found a natural structure that provides the weak interaction action with some additional terms; we will briefly comment on their possible meaning.

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