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Title:	CKM Matrix Parameters From an Algebra
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Abstract:	<p>There exist only four normed division algebras, they can be listed as follows - the real numbers \mathbb{R}, the complex numbers \mathbb{C}, the quaternions \mathbb{H} and the octonions \mathbb{O}. The first three algebras are fairly well known; however, octonions as algebra are not studied much. However, recent research has pointed towards the importance of octonions in the study of high energy physics [Günaydin 73]. Clifford algebras and the standard model are being studied closely. The main advantage of this approach is that the spinor representations of the fundamental fermions can be constructed easily here as the left ideals of the algebra. Also the action of various Spin Groups on these representations too can be studied easily. It is an attempt to understand Standard Model better, it is done by extending the standard gauge group and trying to incorporate gravitational interactions. In this work, we proceed with some recent advancements in the field and try to determine the CKM angles from the theoretical work. To do so; we develop some algebraic structure that imparts us more freedom, we also use octonions to get mass ratios of fundamental fermions. Some results have been obtained; however, much remains to be understood in terms of the real nature of various algebraic structures present in the theory.</p>
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