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Journal Name:	**British Journal of Mathematics & Computer Science**
Manuscript Number:	**2014_BJMCS_10887**
Title of the Manuscript:	**On the Weyl approach to tensor representations of exceptional Lie groups: The case of G_2 and F_4**
Type of the Article	

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.
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PART 1: Review Comments

	Reviewer's comment	**Author's comment** *(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)*
Compulsory REVISION comments	The paper presents a direct approach to the representations, avoiding the traditional method of highest weight theory, based on the Weyl technique, trying to understand the representations in terms of symmetry properties of Young tableaux, for the exceptional Lie groups G2 and F4. The paper is really well written and the results are very interesting: - The group G2 is very well understood with this viewpoint, dispelling one of the remaining uncertainties about this group: as any of the classical groups, the irreps can be understood in terms of symmetry types, starting from the defining seven dimensional representations and taking into account the natural action of G2 as the automorphism group of the unit imaginary octonions. I have enjoyed the explanation in the paper. - For the group F4 there remain some aspects to be worked out by the authors with this approach, trying to find a more compact geometrical	

	description of the irreducible representations, besides its purely algebraic description. The expectation of the author, confident in finding some generalization of the procedure in order to cover this Lie group and even the groups of the E-series, makes me want to be aware of such advance, that for sure he will obtain.	
Minor REVISION comments	Just, as the only suggestion for the paper, in reference 8 "*L. J. Boya, R. Campoamor-Stursberg. Composition Algebras and the two Faces of G2, Int. J. Geom. Methods in Physics 7 (2010), 367-378. ArXiv 0911.3387 [math. phys.]. See also L.J. Boya, C. Rivera. On regular polytopes, Rep. Math. Phys. (Poland) 71(2), 149-161*." after the "main" reference, it appears "See also" and a second reference. I consider that the second reference (very interesting, in my opinion) should be included as a regular reference, not as the second part of another reference (or it should be removed if the author does not consider interesting including such reference). Furthermore, such second reference has not included the year (2012).	
Optional/General comments	The paper is really well written and the results are very interesting	

Reviewer Details:

Name:	**Anonymous**
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