



SDI Review Form 1.6

PART I:

Journal Name:	Physical Review & Research International
Manuscript Number:	MS: 2013_PRRI_3157
Title of the Manuscript:	Charged Black Holes with Yang-Mills Hair and Their Thermodynamics

General guideline for Peer Review process is available in this link: (<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

- This form has total 9 parts. Kindly note that you should use all the parts of this review form.



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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		
Minor REVISION comments	<p>There seems to be some equations not correct: line 102: $q=Q/r_H^2$ should read $q=Q/r_H$ line 109: $\dots = 2(1+q^2)$ should read $(1+q^2)/2$</p> <p>Concerning the references: the first paper on non-abelian black holes with $su(2)$ Yang-Mills field is</p> <p>Non-Abelian Einstein Yang-Mills black holes, Volkov, M.S. et al. JETP Lett. 50 (1989) 346-350, Pisma Zh.Eksp.Teor.Fiz. 50 (1989) 312-315</p> <p>Charged hairy black holes have been considered before.</p> <p>D.~V.~Galtsov and M.~S.~Volkov, "Charged nonAbelian SU(3) Einstein Yang-Mills black holes," Phys. Lett. B 274 (1992) 173. (Note that in the inSpire system it is Baltsov instead of</p>	<p>These typos have been corrected as suggested.</p> <p>We include the reference as a seminal work.</p> <p>We have not been aware of the paper, the classical solution is equivalent to ours, in the present analysis, where there is no coupled matter fields. We add the reference and comment on the equivalence. Nevertheless the discussion on the thermodynamics is the appealing point of our paper.</p>

	Although Galtsov and Volkov use $SU(3)$ as gauge group, the solutions are equivalent to $U(1) \times SU(2)$ solutions considered by the paper. Thus the solutions of the paper are not new. The new thing in the Japanese paper is the thermodynamics.	
<u>Optional/General</u> comments		