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Journal Name:	Physical Science International Journal
Manuscript Number:	Ms_PSIJ_29808
Title of the Manuscript:	H_{α} AND H_{β} PROFILE VARIATIONS IN THE SPECTRA OF EARLY SUPERGIANTS HD198478 AND HD187982
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that \underline{NO} manuscript should be rejected only on the basis of 'lack of Novelty', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline)

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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		
<u>Minor</u> REVISION comments	The paper shows the analysis of spectroscopic observations made by the 2-	
	m telescope at the Shamakhy Astrophysical Observatory in the years 2010-	
	2015 for supergiant star HD 198478 and in the years 2010 - 2014 for	
	supergiant star HD 187982. The method used is the same like that used by	
	Maharramov, Y.M; Baloglanov, A. Sh. 2015, Odessa Astronomical	
	Publications, vol. 28, p. 39 (2015), the standard technique using the 72	
	DECH20 and DECH20t software in addition to the visual inspection of the	
	appearance and disappearance of spectral lines. After an overview of the	
	literature for two supergiant stars I can see this work is similar to that made	
	with above previous published work especially for the star HD187982 with	
	difference in years of observations. The paper delivers results concerning	
	the variations of line profiles of H Alpha and H Beta and determination of	
	some parameters (Radial Velocity & Equivalent Width). These results can	
	be considered to shed light on the spectral variations of these systems with	
	their determined parameters and can be of interest for community of	

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researchers interested in this and similar systems and should be published.

After carefully reading the manuscript I can recommend it for publication in the Physical Science International Journal after minor revisions. As the outcome of the paper the Authors have formulated a number of conclusions compiled in 3 points of one section. Conclusions 1-2 concerning the spectral behavior of the H Alpha line for the star HD198478 with interpretation, while conclusion 3 regarding the spectral behavior of H Alpha line for star HD187982 with explanation for time variations.

Below are listed my specific comments with the list of changes I suggest to introduce in the paper to make it more clear and more easy in reception by a reader. Most of them are simple corrections or omissions.

Specific comments

Abstract

Page 1 line 10:

from observations should be from spectroscopic observations

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I. Introduction

Page 1 lines (50 - 52)

In the study of H α , H γ , 51 Mg II (4481 Å), and Fe II (4924 Å, 5018 Å, 5169 Å) lines observed in the atmospheres of this 52 supergiant is presented [4-5, 11, 12].

should be

Some spectral lines H α , H γ , 51 Mg II (4481 Å), and Fe II (4924 Å, 5018 Å, 5169 Å) are observed in the atmosphere of HD187982, [4-5, 11, 12].

Page 2 line 59

We believe our results will be of interest for further studies of these remarkable stars

must be omitted

II. Observations and processing

Page 2 line 106

the $H\alpha$ line was observed

should be

the Hα line shows

Page 2 line 109

Note that

Should be

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	It is noted that	
	Page 2 line 111	
	were observed	
	should be	
	show	
	Page 3 line 131	
	It is also interesting that	
	should be	
	It is also found that	
	Page 3 line 158	
	to reveal periodic processes additional observation materials is necessary	
	should be	
	to reveal periodicity additional observational materials are necessary	
	Page 3 line 164	
	determined for mean velocities	
	should be	
	determined the mean velocities	
	III. Results and discussion	
	Page 4 line 177	
	These changes may be a sign of complex motions	

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	should be	
	These changes may be an indication of complex motions	
	IV. Conclusions	
	Page 5 line 233	
	First time	
	should be	
	For the first time	
	Figures	
	Page 6	
	label of figure 1 must be corrected for another star I mean HD187982 must	
	be HD198478	
Optional/General comments		

Reviewer Details:

Name:	Magdy Rabie Soliman Sanad	
Department, University & Country	Astronomy Department, National Research Institute of Astronomy and Geophysics, Egypt	

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