

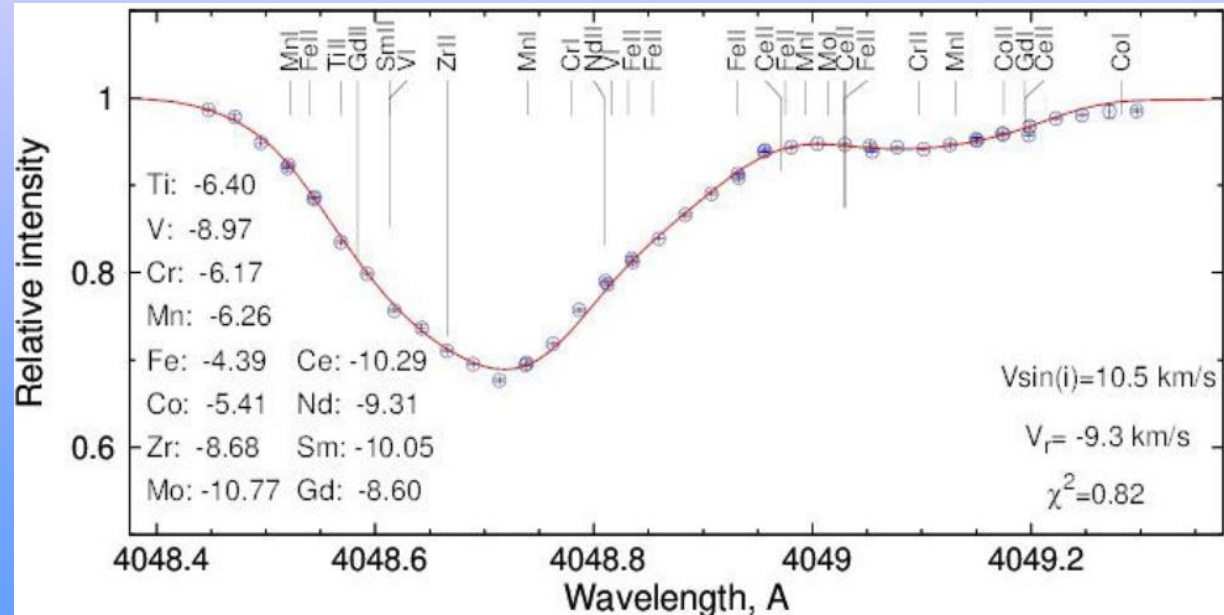
# Revealing the nature of HD157087

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- HD157087 (III) is marginal Am star (Bidelman 1988)
- Significant overabundance of elements with  $Z > 27$  (Yuce et al. 2011)

Object	Photometric calibrations		Fit of Balmer line profiles			
	$T_{\text{eff}} [c_1], \text{K}$	$T_{\text{eff}} [(B-V)_0], \text{K}$	$T_{\text{eff}}, \text{K}$	$\log(g)$	$[M/H]$	$\chi^2 / \nu$
HD157087	$8897 \pm 51$	$8930 \pm 165$	$8882 \pm 100$	$3.57 \pm 0.10$	$0.0 \pm 0.1$	0.5758

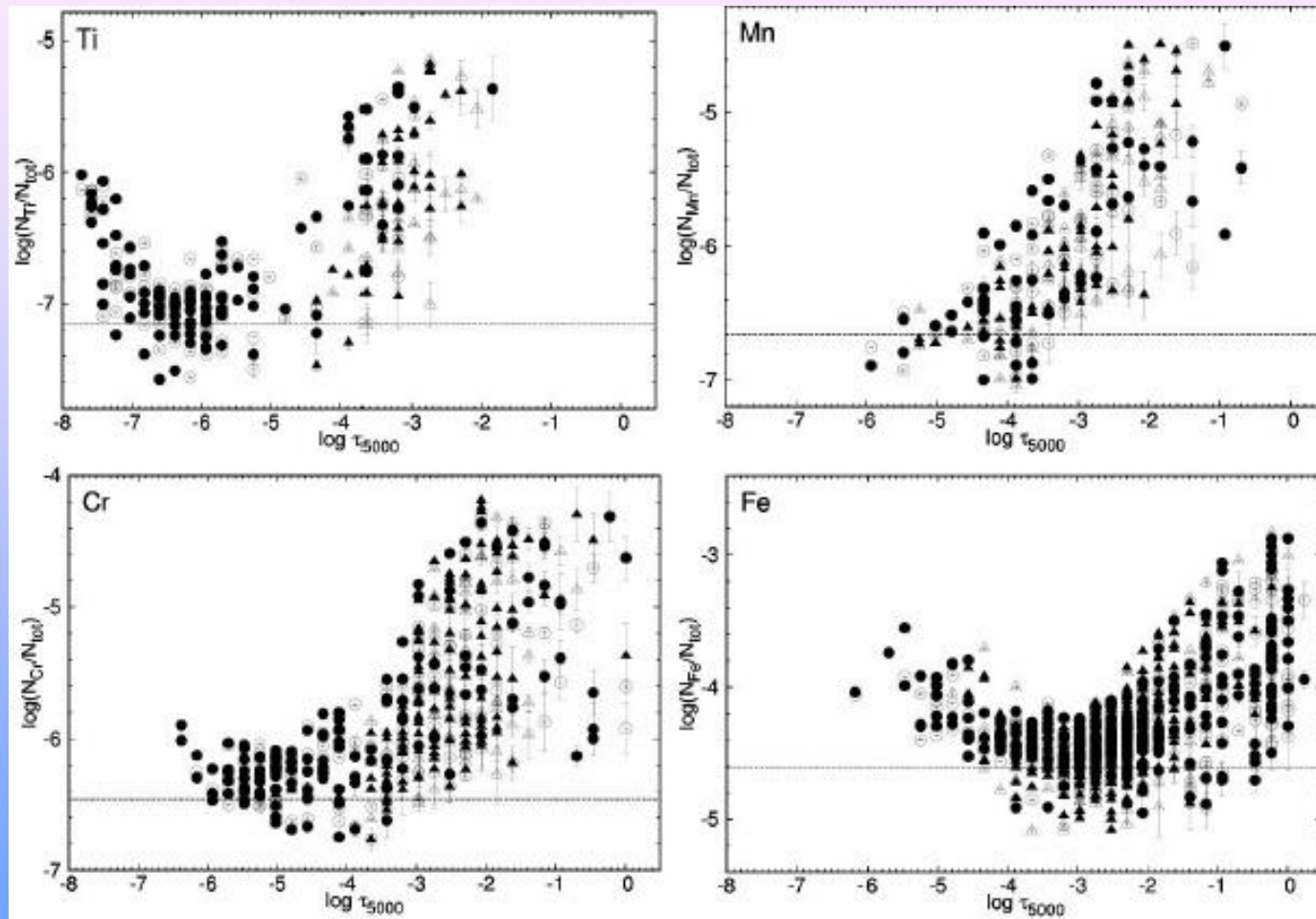
ZEEMAN2  
(Landstreet 1987)



- Am stars have convective envelopes (Michaud et al. 1983)
- Reach on heavy elements and Ca and Sc in deficit (Adelman 1987)

Ion	Feb. 10		Feb. 15		Yüce et al. (2011)	
	[X/H]	N	[X/H]	N	[X/H]	N
He I	-0.08±0.13	4	-0.15±0.09	7		
C I	-0.33±0.08	26	-0.25±0.08	19	-0.14±0.13	3
Mg II	-0.20±0.06	9	-0.22±0.07	9	-0.07±0.23	4
Ca I	+0.22±0.08	38	+0.12±0.07	29	-0.12±0.16	8
Ca II	+0.12±0.10	15	-0.01±0.06	10		
Sc I	+0.90±0.23	7	+1.78±0.19	13		
Sc II	+0.00±0.09	17	+0.74±0.26	9	-0.35±0.19	9
Ti II	+0.39±0.06	109	+0.34±0.06	96	-0.14±0.20	51
Fe II	+0.41±0.05	252	+0.38±0.05	195	+0.15±0.20	73
Cr II	+0.53±0.07	131	+0.47±0.07	108	+0.10±0.21	40
Mn II	+0.63±0.10	55	+0.52±0.09	55	+0.29±0.21	14

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HD157087 is not an Am stars (Khalack 2018)

Astrometric binary system with  $P > 6^y$  (Makarov & Kaplan 2005)

Preliminary periodic analysis of  $V_r$  results in

- short periodic (several days) variations and
- long periodic (several years) variations

HD157087 might be a member of a triple system (Khalack 2018)

Thank you for your attention