2003 Vol. 39 No. 6 pp. 667-670 DOI:

Vector Meson Couplings to Nucleons and Backward ρ and ω Production

Mawuadem Koku Amedeker, ¹ LI Qing-Feng, ² and ZOU Bing-Song³

- ¹ Department of Physics, University of Education, P.O. Box 25, Winneba, Ghana
- 2 Institute of Theoretical Physics, the Chinese Academy of Sciences, P.O. Box 2735, Beijing 100080, China
- 3 Institute of High Energy Physics, the Chinese Academy of Sciences, P.O. Box 918, Beijing 100039, China

(Received: 2002-11-19; Revised:)

Abstract: Data on the production of vector mesons ρ and ω in the backward direction via nucleon exchange are investigated. A better understanding of these data is achieved than hitherto, albeit at a semi-quantitative level. This is achieved partly by using more up-to-date values for the vector couplings and partly by using more precise theoretical formalism. In view of this we conclude that the data do provide a useful constraint on the couplings.

PACS: 11.80 Cr, 11.80 Et

Key words: backward reaction, baryon exchange, u-channel dominance

[Full text: PDF]

Close