

Metric of Rotating Charged Spherical Mass in Vacuum for Vector Graviton Metric Theory of Gravitation

QIAN Shang-Wu,¹ ZHONG Zai-Zhe,² and GU Zhi-Yu³

¹ Physics Department, Peking University, Beijing 100871, China

² Mathematics Department, Liaoning Normal University, Dalian 116029, China

³ Physics Department, Capital Normal University, Beijing 100037, China

(Received: 2005-3-14; Revised:)

Abstract: Based on the vector graviton metric theory of gravitation (VGM) suggested by one of the authors of this article, using the method of null tetrad and analytic continuation, this paper gives the metric of the rotating charged spherical mass in VGM. The result shows once again that a replacement of G by $G^*=G(1-GM/2r)$ in general relativity will yield the corresponding result in VGM for the metric in vacuum.

PACS: 04.20.-q, 04.20.Cv, 04.50.+h

Key words: metric theory of gravitation, vector graviton field, tetrad, Kerr-Newman metric

[\[Full text: PDF\]](#)

[Close](#)