Relation between non uniform magnetic field and close binary systems period

M Zahedi\textsuperscript{1} and D Jassur\textsuperscript{2}

1. Faculty of Physics, Tabriz University, Tabriz
2. Theoretical Physics & Astrophysics, Faculty of Physics, Tabriz University, Tabriz

(Received 12 February 2011; in final form 15 September 2011)

Abstract
Magnetic activity of one or both components of close binary systems can cause orbital period variation of the systems. Variation in gravitational quadropole moment will change the orbital period of the systems. In this article, we suppose that magnetic field is poloidal-troidal according to dynamo theory, and finds its relation with period change in the systems.

Keywords: close binary systems, orbital period, magnetic dynamo theory

For full article, refer to the Persian section