NATIONAL UNIVERSITY of SCIENCE and TECHNOLOGY



FACULTY of INDUSTRIAL and BUILT ENVIRONMENT DEPARTMENT of TECHNICAL TEACHER EDUCATION

On a General Theory of Planetary Placement.

By,

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A Dissertation Submitted to the, National University of Science and Technology, Department of Technical Teacher Education, In Partial Fulfillment of the Requirements for the Degree, BACHELOR OF EDUCATION HONOURS IN APPLIED PHYSICS

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May 15, 2013.

ABSTRACT

By using the concept of potential wells, we derived the Titius-Bode law, even, $R_n = R_{star}e^{an}$, introduced a new gravitational constant μ_5 derived from the Solar system and a dimensionless variable parameter a. Thereafter, we predicted the possible allowable semi major axis for the Solar system, HD 10180, Kepler -11 and 55 Cancri and compared them to current observations. We statistically tested the fitness of the Titius-Bode law to observations by using the chi squared test and concluded that the fitness of the law is a less likely to be due to coincidence.

Keywords: Titius-Bode law, Solar system, HD 10180, Kepler - 11, 55 Cancri