

LIGO PUBLISHED DATA IN AGREEMENT
WITH MODIFIED POLARIZABLE VACUUM THEORY

14 February 2016
V1 By
Jerry L Decker Ph.D.
Retired Professional Engineer

Abstract

LIGO published data of mass energy conversion to momentum energy at high speed was found to be in agreement with modified Polarizable Vacuum Theory in deep space at high speed. The observed conversion of mass energy to momentum energy was in agreement with predictions of modified PV theory for high speed interactions of massive objects with the vacuum.

Introduction

General relativity predicts the rapid merger of black holes from orbital energy radiating away as gravity waves in the form of fluctuating vacuum stress energy propagating to far distances. LIGO published ⁽¹⁾ the discovery of just such an event in agreement with GR, but also found a conversion of mass energy to momentum energy that is not predicted by GR.

Polarizable Vacuum of Harold Puthoff ⁽²⁾ and others, as modified ⁽³⁾ for high speed in deep space does predict conversion of mass energy into momentum energy at high speed.

Comparing LIGO Data To Modified PV Theory

Calculations are based on well-known energy and momentum equations which do not make a complete set for simulation of an exact case.

$$\begin{aligned} 1.1) \quad & E^2 = (mc^2)^2 + (pc)^2 \\ 1.2) \quad & (pc) = E(v/c) \\ 1.3) \quad & dE = v dp \end{aligned}$$

The set of equations is completed with additional equations based on Quantum Mechanics for one action, a new interpretation of Heisenberg Uncertainty for many actions, and metric solutions of General Relativity.

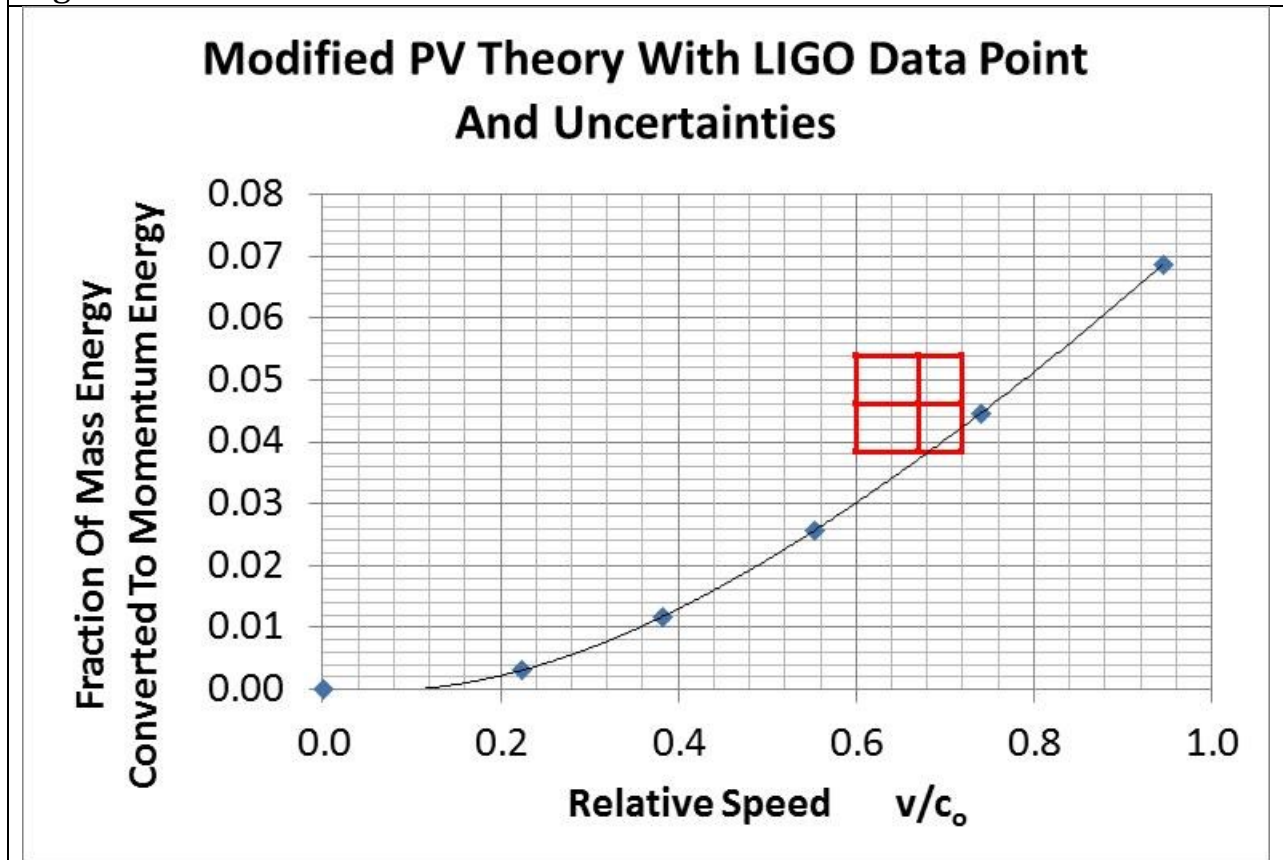
$$\begin{aligned} 2.1) \quad & E = hf \\ 2.2) \quad & dE/df = \hbar \\ 2.3) \quad & c/c_0 = f^2/f_0^2 \end{aligned}$$

Integration is possible with the complete set of equations, giving predictions for any high speed mass energy and momentum and the conversion of mass energy into momentum energy.

Calculations were tabulated in a spread sheet and displayed numerically and graphically allowing a large number of proposed equations to be eliminated because of making impossible predictions. A number of other acceptable equations can be substituted for (2.2) but were found to give very similar results with small differences in energy and momentum functions that are used in this article.

A graphical presentation is helpful to interpret the results. From a tabulation of calculated results the energy and momentum are plotted for different speeds.

Figure 1



The Figure 1 shows a good agreement with LIGO data and the modified Polarizable Vacuum Theory.

Conclusions

In conclusion there is observational evidence from LIGO in support of modified Polarizable Vacuum Theory.

Limitations and Future Work

Additional data will be needed from observations at high speed in deep space to increase confidence in the conclusions.

Acknowledgements

Thanks are given to Harold Puthoff for private correspondence and all of the published work on polarizable vacuum. He has not commented on the variant of PV theory described in this article.

Recognition is given to Ulla Mattfolk of Finland for help in developing the theories and recognizing the biological questions about limitations for living organisms to function at the level of micro physics during high speed travel in space that is over saturated with kinetic energy and gravity fields.

Reference Notes

- 1) https://dcc.ligo.org/public/0122/P1500218/012/GW150914_parameter_estimation_v13.pdf3)
- 2) puthoff@earthtech.org
- 3) <http://vixra.org/abs/1511.0085>