

Gravity Modification Workshop

MAKING THE NEW PHYSICS ACCESSIBLE TO ENGINEERS

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The Critical Need to Move Forward

▶ Our tools not our minds:

- ▶ If a 100,000 of our brightest minds have not been able to solve the gravity modification physics these last 100 years, then the problem is not with our minds but with our tools.

▶ The physics of gravity modification has been solved:

- ▶ Solomon solved the gravity modification physics with the discovery of Ni Fields and the new massless equation for gravitational acceleration, $g=\tau c^2$.
- ▶ This equation is the new propulsion equation that will drive the invention of new types of engines.

▶ Occam's Razor:

- ▶ The same simple $g=\tau c^2$ massless formula for gravitational acceleration is correct for mechanical and electromagnetic accelerations.
- ▶ Quantum theory is much more complicated, requiring a different particle for each type of force:
 - ▶ Virtual photons for electromagnetic forces.
 - ▶ Gravitons (no empirical evidence these exists) for gravity.
- ▶ By Occam's Razor, $g=\tau c^2$ is the superior model of Nature's macro forces.

What does the Workshop Accomplish?

- ▶ **Improve return on research funding:**
 - ▶ Recognizing issues in physics that are not feasible today.
 - ▶ Construct new engineering research programs that are likely to succeed.

- ▶ **Gravity modification physics & technology:**
 - ▶ Provide an empirically validated knowledge base for gravity modification.
 - ▶ Excel models provided with explanation on how to build and use them.
 - ▶ Ability to construct your own experiments and research programs in gravity modification, today.

Workshop Overview: Program (≈210 slides)

Introduction

- ✓ Principal Investigator
- ✓ Kline Directive
- ✓ Types of Theories
- ✓ New Definitions & Formulae
- ✓ Emergence

Current Fallacies

- ✓ Rigor & Falsifiability
- ✓ Feasibility & Commercial Success
- ✓ Interstellar Rocket Concept Fallacies
- ✓ Physics Inconsistencies
- ✓ Process Models

Time Travel Lessons

- ✓ Universe Designer Questions
- ✓ A Time Travel Universe
- ✓ No Time Travel Universe
- ✓ Lorentz-FitzGerald Revisited
- ✓ The Law of Unique Existence

Tools & Models

- ✓ Designing Excel Worksheets
- ✓ X Numbers Add In
- ✓ Mechanical Acceleration
- ✓ Gravitational Acceleration
- ✓ Electromagnetic Acceleration

Engineering Designs

- ✓ Laithwaite's Rotating Spinning Disc
- ✓ Podkletnov's Observations
- ✓ Superconducting Disc Model
- ✓ Theoretical Engine Designs Issues

Workshop Overview: Introduction (29 slides)

Principal Investigator

- ✓ Principal Investor & Presenter

Kline Directive

- ✓ Who
- ✓ Nature
- ✓ Scope
- ✓ Interstellar Challenge Matrix (ICM)

Types of Theories

- ✓ Recognizing Feasibility for Funding
- ✓ Millennium Theories
- ✓ Century Theories
- ✓ Engineering Feasible Theories

New Definitions & Formulae

- ✓ Gravity Modification
- ✓ Interstellar Propulsion
- ✓ Ni Fields & $g=tc^2$
- ✓ Laithwaite's Big Wheel
- ✓ Var-Gamma & Spatial Probability
- ✓ Emergence

Emergence

- ✓ Definition
- ✓ (E1) New Property
- ✓ (E2) Impeller Property
- ✓ (E3) Resemblance Property
- ✓ (E4) External Factor Property
- ✓ (E5) Form Property
- ✓ (E6) Inheritance Property
- ✓ (E7) Reversion Property

Workshop Overview: Current Fallacies

(51 slides)

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Rigor & Falsifiability

- ✓ Peer Review
- ✓ Mathematical Rigor
- ✓ Mathematical Sophistication
- ✓ Falsifiability
- ✓ Strong & Weak Forms
- ✓ The Standard Model
- ✓ Shape of Universe Effect

Interstellar Rocket Concept Issues

- ✓ Conventional Rockets
- ✓ Atomic Bomb Pulse Detonation
- ✓ Antimatter Rockets
- ✓ Wormholes / Time Travel
- ✓ Alcubierre Type Warp Drives
- ✓ Quantum Foam Propulsion
- ✓ Small Black Hole Propulsion

Feasibility & Commercial Success

- ✓ Review Kline Directive
- ✓ Interstellar Challenge Matrix
- ✓ Definition of Commercial Success

Physics Inconsistencies

- ✓ Baking bread
- ✓ Universe structure
- ✓ 5-Particle Box Paradox
- ✓ Consistency
- ✓ Time travel
- ✓ Quantum foam
- ✓ Exotic matter
- ✓ Tensile particles
- ✓ Virtual particles
- ✓ Mass proxy
- ✓ Wave function
- ✓ Photon probability
- ✓ Probability fields
- ✓ Spectrum Independence
- ✓ Photon structure
- ✓ Sophisticated spacetime

Process Models

- ✓ What are Process Models?
- ✓ Structural Questions

Workshop Overview: Time Travel Lessons

(32 slides)

Universe Designer Questions

- ✓ Designing to Allow for Time Travel
- ✓ Designing to Prevent Time Travel

A Time Travel Universe

- ✓ Thin Slice of Baking Bread
- ✓ Definition Problem
- ✓ Basic Outline
- ✓ God's Issues
- ✓ Mass-Energy
- ✓ Arrow of Time
- ✓ Temporal Reversibility

No Time Travel Universe

- ✓ Expanding Sphere
- ✓ Basic Outline
- ✓ God's Issues
- ✓ Mass-Energy
- ✓ Arrow of Time
- ✓ Temporal Reversibility

Lorentz-FitzGerald Revisited

- ✓ Formulation
- ✓ Black Holes

Law of Unique Existence

- ✓ Law of Unique Existence

Workshop Overview: Tools & Models

(59 slides)

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Designing Excel Worksheets

- ✓ Internal Spreadsheet Design
- ✓ Modular Worksheet Design
- ✓ Model Integrity
- ✓ Model Cohesion
- ✓ Exercise 01 & Answers

XNumbers Add In

- ✓ Numbers As Strings
- ✓ Syntax
- ✓ Exercise 02 & Answers

Mechanical Acceleration

- ✓ $g = \tau c^2$
- ✓ Linear Acceleration
- ✓ Centripetal Acceleration
- ✓ Something to Think About
- ✓ Rules for Combining 3D Ni Fields

Gravitational Acceleration

- ✓ The Gravity Schema
- ✓ Local Field Effects
- ✓ Local Acceleration Model
- ✓ Review Excel Worksheet Model

Electromagnetic Acceleration

- ✓ Classical Electromagnetism
- ✓ Electromagnetic Ni Fields
- ✓ Review Excel Worksheet Model

Workshop Overview: Engineering Designs (≈50 slides)

Laithwaite's Rotating Spinning Disc

- ✓ Reviewing the Ω Function
- ✓ Reconciling Others' Results
- ✓ Numerical Model

Podkletnov's Observations

- ✓ Podkletnov's 1992 paper
- ✓ Lesson: Asymmetric Fields
- ✓ Podkletnov's 1997 paper
- ✓ Definition of Gravity Modification
- ✓ Implementing Asymmetric Fields
- ✓ Critical Observations for Model

Superconducting Disc Model

- ✓ Origin Independent Locality
- ✓ Broadened Principle of Equivalence
- ✓ Magnetic Field & the Single Field Effect
- ✓ The Electromagnetic Model
- ✓ Model Results
- ✓ Non-Superconducting Experiment

Theoretical Engine Designs Issues

- ✓ Engine Design 1
- ✓ Engine Design 2
- ✓ Engine Design 3
- ✓ Engine Design 4

Principal Investigator & Presenter

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- ▶ Founder & Chairman of the Xodus One Foundation (<http://www.XodusOneFoundation.org>)
- ▶ Principal Investigator, since 1999, at iSETI LLC (<http://www.iseti.us/>)
- ▶ Discoveries
 - ▶ Ni Fields & $g=tc^2$ massless gravitational acceleration.
 - ▶ Var-Gamma Photon Spatial Probability Field which unifies Shielding/Invisibility, Cloaking/Resolution and Transmission into a single phenomenon.
- ▶ Published the 12-year study, An Introduction to Gravity Modification (available on Amazon.com & other stores).
- ▶ Published numerous peer reviewed papers.

Workshop Details

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- ▶ **Title:** The Gravity Modification Workshop
- ▶ **Presenter:** Benjamin T Solomon
- ▶ **Duration:** 1 day (8:00am – 5:00pm)
- ▶ **Location:** 1624 Market St., #202, Denver, CO, USA
- ▶ **Date:** Friday, August 08, 2014.
- ▶ **Max Class Size:** Max 10 attendees. Workshop.
- ▶ **Min Class Size:** Min 5 attendees to cover costs.
- ▶ **Fee:** \$750 introductory workshop fee. Price next year is \$999.
- ▶ **Register By:** 08/01/2014 is last date for receipt of payments. Class will be confirmed by August, 02 2014.
- ▶ **Materials Provided:** DVD of
 - ▶ Workshop PowerPoint slides.
 - ▶ Excel models used to discover the new physics.
- ▶ **PC Requirements:** Windows 7 or later notebooks/laptops (not provided). Note: Android, iPad & MS **tablets not suitable** as these won't execute the Excel Add In.
- ▶ **Meals:** Breakfast & Lunch will be provided during workshop session.

Contact Details

- ▶ Please email Ben Solomon, [bts AT XodusOneFoundation . Org](mailto:bts@XodusOneFoundation.Org)
 - ▶ To register & make payments by August, 01 2014.
 - ▶ To attend the previous evening's (6:00pm, August 07, 2014) social included in the ticket price.