Unsolicited Proposal

Restoration in Mathematics, Physics and Philosophy

Ali F. AbuTaha
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The Four Lectures below will dramatically alter the course of many important subjects. The Contractor will describe serious mistakes in the most fundamental laws of science that have undermined the design, cost, operation and safety of many systems. New methods will be of immediate utility to every agency, company and school. This Work began in Amman, Jordan, half a century ago, and Honorable Jordanians funded it. The Work is submitted as a Contribution of the Kingdom of Jordan to the notable national and international Vision for the space program outlined by President George W. Bush on 1/14/04.

Lecture 1
F=ma, Important Equation, Big Mistake

Background: "F=ma" is the most important equation in science and engineering and, even, in history. Yet no one knows its true meaning or how it was developed. Is the equation, as a senior physicist asked, "a meaningless logical absurdity?"

Lecture: Ali F. AbuTaha will describe the history of the equation, how it was derived, who derived it and who didn't, what it means and what it does not mean. He will explain away the confusion and the great debates that surrounded the important equation for 300 years. Facts about the equation will shock scientists, engineers, philosophers, psychologists, and theologians. The evidence will impact all of physics, all fields of engineering and other important subjects.

Lecture 2
Finding the "Lost Force" and A New Principle of Superposition

Background: In the 18th Century, mathematicians ran into a puzzling problem, which they called the "Lost Force." What is the Lost Force? How was it lost? Why was it lost? When was it lost? Was the "Lost Force" ever found? The answer to the last question is a definite "No."

Lecture: AbuTaha will give the steps to derive and explain the "Lost Force." The misuse of the equation F=ma and the Lost Force have caused many accidents, failures, losses and tragedies, especially in industrial countries. All engineering curricula and the design of critical systems must be reconsidered in light of the evidence presented here. Finding the "Lost Force" leads to a New Principle of Superposition of motion, which will require the revision of 20th Century physics.

Lecture 3
True Form and Meaning of the Conservation of Energy and Momentum

Background: The laws of conservation are called the most sacred principles in physics and the backbone of many subjects. For over 300 years, experts attempted to develop the conservation laws as part of the *Mechanical Program*. In the end, Henri Poincare asked, *"What exactly remains constant?"* in energy conservation, and Dr. Albert Einstein summarized the effort as follows*, "Science did not succeed in carrying out the mechanical program convincingly, and today no physicist believes in the possibility of its fulfillment."*

Lecture: AbuTaha has pursued the *Mechanical Program* persistently for half a century. He will show how everyone, including Sir Isaac Newton, mishandled the conservation laws. AbuTaha will explain, "What exactly remains constant?" in energy conservation. He will derive and show the correct mathematical form and true meaning of the conservation laws. This will profoundly impact many subjects in the arts and the sciences.

Lecture 4
Mathematics of Dialectic and the Forms

Background: Dialectic was called the crowning science of all the sciences. It is the science that studies the Forms. Plato said that Dialectic unifies fragmented sciences and mathematics into a single reality, he developed the Theory of the Forms for the purpose, but he did not integrate the two subjects with coherent mathematics. For 3,000 years, no one was able to construct the arithmetic and geometry of Dialectic and the Forms. Today, no one knows the vital role of the Dialectic in science and engineering and, even, in economics, philosophy, psychology, and other important subjects.

Lecture: AbuTaha will reconstruct the extraordinary mathematics of Dialectic. He will review the basics of Dialectic and the Forms as expounded by Plato and Aristotle, Ibn Rushd (Averroes) and Al-Khawarismi (Algorismi of mathematical-logical algorithms), Oresme of Paris and the Mertonians at Oxford, and, in modern times, Galileo. The mathematics of the Dialectic and the Forms will become a basic unit of study all over the world. The arithmetic and geometry of Dialectic and the Forms will become an integral part of commonsense. In the great tradition of western thought, this Lecture completes a great Restoration in Mathematics, Physics and Philosophy.

Proposed Program

1. Deliver the Four Lectures plus Q/A sessions in a format acceptable to the Customer and the Contractor (1-2 hours each).
2. Give Customer personnel 2-4 weeks to conduct independent Research on the vast material covered in the Four Lectures.
3. Conduct four one-day Workshops on the Four Subjects after the Research period.
4. Submit a copy of manuscript of the Lectures prepared during the Contract.

Terms and conditions

1. Customer shall provide facilities for the Lectures and the Workshops.
2. There are no limitations on the use of the information presented by the Contractor.
3. There are no restrictions or conditions on new discoveries or inventions by the Customer personnel. Information presented by the Contractor shall be referenced where applicable.

Actions to be Anticipated by Customer

1. The new novel mathematical and scientific methods will directly impact the design of existing and future systems. Customer will be responsible for applying the new methods to those systems.
2. Customer should expect, and prepare to manage, an avalanche of ideas, suggestions, opinions, theories, discoveries and inventions by its employees and others.

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The author

Ali F. AbuTaha, a Jordanian-American, has made major contributions to science, engineering and space systems. He began work in engineering in Amman, Jordan in the 1950's, attended the George Washington University (GWU) in 1964, and began work in satellite and space systems in 1969. He held technical, management and key consulting positions with hi-tech companies. AbuTaha invented the Natural Motion, or Self-Motion, Mechanism, which, for the first time, emulates the workings of the nervous system in living organisms (U.S. Patent No. 6,826,449 dated Nov. 30, 2004). His analysis of the heat mechanism in the Cold Fusion process, published in the MIT Journal of Fusion Energy (1990), was demonstrated in the laboratories of the Royal Scientific Society (RSS) in Jordan and the Florida Institute of Technology. His Continuing Engineering Education Programs were invited by the RSS-UNDP, and were highly praised by experts attending in Jordan and at GWU, and public, private and military centers. In 1993, AbuTaha formalized a Theory of Gravitation and Unified Interaction that rivals other theories. Ali F. AbuTaha is widely known for analyzing the critical transient conditions in space systems, and for his investigation of the Space Shuttle Challenger Accident. He also invented the Pulsing Thrust Method, to significantly boost the thrust of propulsion systems, which has been successfully demonstrated by the U.S. Air Force. Leaders from the White House, the Congress, Air Force Space Command and elsewhere recognized his works. AbuTaha's works were reported worldwide. He is a Distinguished Life Member in the Armed Forces Communications and Electronics Association, and he received a Congressional Order of Liberty (1993) and numerous certificates of merit and honor.

AbuTaha's present Program, *"Restoration in Mathematics, Physics and Philosophy,"* integrates the great tradition of western thought in mathematics, physics and philosophy, including, Jewish, Hellenic and Hellenistic Greek, Roman and Byzantine, Arab-Muslim, Medieval Christian and Modern traditions. The Program consists of Four Lectures.