

[Thomas Lee Elifritz](mailto:thomas@cosmic.lifeform.org)
221 East Main Street
Marshall, Wisconsin 53559

<http://cosmic.lifeform.org>
elifritz@charter.net
(608) 345-8891

Thomas Lee Elifritz

Direction	To continue modern theoretical and experimental investigations into strongly correlated electron systems, lightweight, affordable earth to low earth orbit launch vehicle architectures, closed ecological life support systems, and super insulated, low carbon emission, earth sheltered homes and habitats for earth and space.	
Director of Research	Launch LLC, The Tsiolkovsky Group, Marshall, Wisconsin, USA Company Founder and Chief Executive Officer Performed Multidisciplinary Research in the Natural Sciences Engaged in Systems Engineering, Research and Development Projects Published Seminal Reports for Emerging Commercial Space Flight Industry	2006 - 2016
Astronaut Training	Lansing Cay and Rudder Cut Cay, The Exuma Cays, The Bahamas Machine Shop, Dock and Boatyard Construction, Hurricane Preparedness Space Port, Resort, Astronaut Training and Launch Facilities Development	2001 - 2005
Elifritz vs. Elifritz	Civil Court Litigation, The State of Florida, Lansing Cay, Exuma Cays Prosecuted a successful legal effort for defendant's discovery documents, resulting in the half Bahamian island ownership of Lansing Cay, Exuma.	1998 - 2000
Elifritz vs. Elifritz	Supreme Court Order, The Commonwealth of the Bahamas, 1997 #20 Argued a successful legal defense of Bahamian island ownership, resulting in a time sharing agreement with development restrictions.	1996 - 1997
Technical Director	Caribbean Marine Research Center, Lee Stocking Island, Bahamas Personal Assistant to the Director of the Research Center Scientific, Laboratory and Telecommunications Technical Director Island and Field Coordinator for Resident, Guest and Scientist Safety Performed, Published, and Presented Multidisciplinary Research Results	1989 - 1995
Software Engineer	AmTel Communications, Inc., McFarland, Wisconsin, USA Developed and Maintained Self Recompiling polyFORTH II Nucleus Maintained "EVE" - The World's Largest polyFORTH II Application Implemented Training Programs for Programmers and Engineers Assured Cross Target Compiler Capability Across Multiple CPUs	1987 - 1988
Director of Research	Syntech Living Systems, Windsor, Wisconsin, USA Performed Basic Life Science Experiments Designed Products for Scientific and Technical Markets Implemented Machine Shop and Manufacturing Capabilities Developed and Maintained Life Sciences Laboratories and Facilities	1981 - 1986
Education	The University of Wisconsin, Madison, Wisconsin, USA	1978 - 1980

Sixty four (64) degree credits in the Applied Mathematics, Engineering and Physics program, equivalent to an associate's degree in rocket science and engineering, including humanities and foreign language requirements, applied mathematics through advanced calculus and linear algebra, engineering mechanics through statics and dynamics, mechanics of materials and orbital mechanics, modern physics and chemistry, and extensive self study and life experiences, including field work.

[Gravitational Axions as Dark Matter \(PDF\)](#)
[The Cosmic Evolution of Autobiogenesis \(PDF\)](#)
[Gravitational Axions in Quantum Gravity and Cosmology \(PDF\)](#)
[On the Nature of Bismuth \(I\) Iodide in the Solid State, Spec. Sci. Tech, 17, 85 \(1994\). \(PDF\)](#)
[Superconductivity Theory Applied to the Periodic Table of the Elements, In NASA, Johnson Space Center, Proceedings of the 4th International Conference and Exhibition: World Congress on Superconductivity, Volume 2, 500 \(1995\).](#)
[First Light](#), Research Proposal for Foundation Science at the Wisconsin Institute of Discovery.
[An American Vision](#), Position Paper on National Science Policy, Submitted to <http://change.gov>.
[21st Century Space Policy](#), Comment Submitted to the National Academies Space Board.
[Human Space Flight - A New Direction](#), Position Paper for the Augustine HSF Review Committee.
[Augustine Committee Recommendations](#), Personal Letter to Norman Augustine at Lockheed Corporation.
[The Planet Ceres - A Worthy Goal for a Great Nation](#), Commentary on National Space Policy.
[The British Scale for Launch Vehicle Mass Classification](#)
[The Meghar Scale of Planetary Mass Classification](#)
[Commercial Orbital Space Transportation System](#), NASA Solicitation JSC-COTS-2.
[Commercial Crew Development](#), NASA Solicitation JSC-CCDev-1.
[Heavy Lift Launch and Propulsion Technology](#), NASA RFI Solicitation 05042010PS40.
[Heavy Lift Launch and Propulsion Technology](#), NASA Broad Agency Announcement NNM10ZDA001K.
[Heavy Lift Reusable Launch Vehicles](#), Quarterly Report - The Tsiolkovsky Group, Madison, Wisconsin, USA.
[Launch LLC](#), Annual Report, The Tsiolkovsky Group, Madison, Wisconsin, USA.
[United States National Space Policy](#) - Safety, Security and Diplomacy through Science and Technology, Written Statement for the President and his Council of Advisors on Science and Technology (PCAST).
[The Future of Life on Earth](#), NASA RFI Solicitation NNH10ZDA010L, The Past, Present, and Future of Life on Earth : Scientific Connections between NASA's Earth Science Division and Astrobiology Program.
[Commercial Space Stations](#), NASA RFI Solicitation NNHXXZCJ001L, Evolving ISS into a LEO Commercial Market.
[Asteroid Redirect Mission](#), NASA Broad Agency Announcement NNH14ZCQ002K.
[Delta 9 Reusable Launch Vehicle](#), USAF RFI Solicitation 14-090, Booster Propulsion and Launch System.
[Reusable Space Launch Systems](#), NASA Innovative Advanced Concepts NIAC Solicitation NNH11ZUA001N.
[Resource Exploration and Exploitation in Near Earth Space](#), Satellite Salvage, Reservoir Crater Exploration and Asteroid Capture and Derotation, NASA Innovative Advanced Concepts NIAC Solicitation NNH12ZUA002N.
[The Lunar Direct Polar Moon Base Concept](#), NASA Innovative Advanced Concepts NIAC Solicitation NNH13ZUA001N.
[Internal Inflatable Pressure Vessels For Pressurized Upper Stage Fuel Tanks](#), NASA Innovative Advanced Concepts NIAC Solicitation NNH14ZOA001N-14NIAC.
[Modular Space – Engine Recovery Modules for Reusable Space Flight](#), NASA Innovative Advanced Concepts NIAC Solicitation NNH15ZOA0001N-15NIAC-A1.
[Quantum Astrophysics](#) – Quantum Physics and Astrophysics – A New Paradigm For Human Habitation, NASA Innovative Advanced Concepts NIAC Solicitation NNH15ZOA0001N-15NIAC-A3.
[The Quantum Initiative](#) – Energy in the 21st Century.
[Lunar Direct](#) – Landing on the Moon in a Single Launch.
[Asteroid Missions](#) – Upper Stage Orbiters, Landers, Hoppers and Bases.
[Ceres Mission](#) – Human Missions to the Fifth Planet Ceres.
[OSIRIS-REx II to Mars](#) – Mars Sample Return Mission Proposal for NASA and the Lunar Planetary Institute.
[Phobos and Deimos](#) – Living on the Moons of Mars.
[Deimos Mission](#) – Vertical Cylindrical Cased Tunnel Shaft Excavations.
[Space Exploration and Development Architectures](#) (For SpaceX Falcon Launch Vehicles).
[Liquid Reusable Boosters for Lunar Direct Polar Moon Base Development](#) (Using SLS Core Stages).
[Lunar Injection, Circumnavigation, Flyby and Gravity Assist Trajectories](#) (For SLS Core Stage Recovery).
[The National Academies – Committee on Human Spaceflight – Public Input](#)
[The Evolution of a Reusable Space Launch System \(SLS\)](#)
[The Delta V Reusable Space Launch System](#)
[The Space Case – The Case for Space](#)
[Terraforming Planet Earth](#)
[Space Colonization](#)
[Earth Colonization](#)
[The Space Station](#)
[The Space Place](#)