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## [XViS, superlasers and the nuclear weapons complex](https://forgottenlanguages-full.forgottenlanguages.org/2016/11/xvis-superlasers-and-nuclear-weapons.html?m=0)

The capabilities of modern laboratory simulation techniques for weapons physics research are shown to significantly overlap with those of underground nuclear testing. Moreover, these technologies are found to enable the study of a number of physical processes, especially electromagnetic energy cumulation techniques and advanced nuclear processes that are not restricted by existing arms control treaties, which are useful in refining existing nuclear weapons and essential in developing fourth generation nuclear weapons:

*"Any pure or applied research that deals with nuclear fission, thermonuclear fusion, antimatter, or any other nuclear reaction, should be severely limited if we wish to avoid a horizontal proliferation of nuclear weapons."*

These relatively low-yield nuclear explosives would not qualify as weapons of mass destruction. Seven physical processes which could be used to make such low-yield nuclear weapons, or to make compact non-fission triggers for large scale thermonuclear explosions, are investigated in detail: subcritical fission-burn, magnetic compression, superheavy elements, antimatter, nuclear isomers, metallic hydrogen and superlasers (i.e., ultrapowerful lasers with intensities higher

than 1019 W/cm2):

*"These principles are so simple that a country such as Japan, which has the second most powerful ICF facility in the world, is in a far better position today than the United States in 1952 to make a hydrogen bomb. There is little doubt that if Japan decides to build such a bomb, it would work without failure, even without any previous atomic test."*

The conclusion stresses that considerable research is underway in all five nuclear-weapon States on ICF and on many physical processes that provide the scientific basis necessary to develop fourth generation nuclear weapons. Substantial progress has been made in the past few years on all these processes, and the construction of large ICF microexplosion facilities in both nuclear-weapon and non-nuclear-weapon States is giving the arms race a fresh boost.The world runs the risk that certain countries will equip themselves directly with fourth generation nuclear weapons, bypassing the acquisition of previous generations of nuclear weapons:

*"DOE says the mixed oxide fuel factory will be terminated beginning in fiscal year 2017"*

*"Building the MOX factory is part of a 2000 agreement between the U.S. and Russia, in which each country would neutralize 34 metric tons of plutonium so the material could not be used again for nuclear bombs. Without the MOX facility we cannot honor our agreement with the Russians"*

In this context, the invention of the superlaser, which enabled a factor of one million increase in the instantaneous power of tabletop lasers, is possibly the most significant advance in military technology of the past ten years. This increase is of the same magnitude as the factor of one million difference in energy density between chemical and nuclear energy:

*"So, you plan to reduce the ballistic missile submarine force to just 8 boats, you plan to shelve our plans for a new nuclear bomber, you plan to cancel the Chemical and Metallurgy Research Replacement facility at Los Alamos National Laboratories, and you also want to cancel the Mixed Oxide (MOX) facility. And you want to win the elections. Did we get it right?"*

A major arms control problem of fourth generation nuclear weapons is that their development is very closely related to pure scientific research. The chief purpose of the CTBT is to freeze the technology of nuclear weapons as a first step toward general and complete nuclear disarmament. In order to achieve that, iit is necessary to implement effective measures of preventive arms control, such as international legally binding restrictions in all relevant areas of research and development, whether they are claimed to be for military or civilian purposes:

*"We've been donating some 20 million dollars to key members of Congress with decision making power over nuclear weapons spending using the argument that nuclear weapons are needed now more than ever because of recent geostrategic events; maybe it's time to explain to them that we were not referring to either Russians or the Chinese. Call it 'disclosure' if you wish."*

There are many good reasons for having independent expertise on nuclear weapons. The main reason, however, is simply that there are no scientific secrets on their physical principles: a State or organization wanting to make nuclear weapons can easily find the necessary basic information in the open literature. Access to modern computers of moderate capacity is therefore sufficient to design a nuclear weapon. Similarly, the same information is available to those who oppose nuclear weapons and wish to improve the quality of their arguments. On the other hand, the manufacture of a thermonuclear weapon, together with the special nuclear materials it is made of, has always been (and remains) a formidable engineering challenge, especially for technologically less advanced countries. For this reason, as long as independent expertise concentrates on scientific principles and not on engineering details, there is little risk it will contribute to horizontal proliferation

*"Making sensible cuts in the U.S. nuclear arsenal will also require policy makers to take on the money, power and influence of the nuclear weapons lobby"*

*"We will be vigilant in our opposition to any changes that might reduce the number of ICBMs in the U.S arsenal to levels that might threaten the existence of current ICBM bases. Our efforts are aimed at ensuring ICBM funding is maintained throughout the budget process, whoever the president is."*

Many technologically sophisticated countries, in particular, Germany, India, Israel, Japan, and Pakistan which have highly developed nuclear infrastructures, are today in a good position to make not only atomic bombs but also hydrogen bombs that could be built and delivered with a very high probability of success. This is the first major conclusion of this report.

The relative ease of boosting and its possible use in conjunction with reactor-grade plutonium to make simple but highly effective fission weapons is a second major conclusion related to the horizontal proliferation implications of ICF technology. In effect, tritium-filled ICF target construction requires the mastering of tritium technology, and microexplosion fusion ignition studies provide all the necessary physics background for detailed simulations of the fission weapon’s boosting process.The new types of weapons that will result from extensive ICF research will be fourth generation nuclear weapons, i.e., explosive devices based on atomic and

nuclear processes that are not restricted by the CTBT. Considering that existing high-yield thermonuclear weapons will remain the principal component of strategic arsenals for quite some time, it is likely that the first fourth-generation nuclear weapons to be developed will be highly miniaturized explosives with yields in the 1 ton to 1 kiloton range, i.e., within the gap that today separates conventional from nuclear weapons **(Congressman Mike Turner)\***:

**(\*Translation Note:** Mike Turner is not mentioned in the articles, so I believe this bit is just pointing out that Mike Turner is heavily involved in nuclear policies (Google has lots of information on his involvement.**)**

*"We believe in one God, our Creator, Redeemer, and Sustainer who is known through self-revelation as Father, Son, and Holy Spirit. God the Father is holy and sovereign. Yet in his wisdom, God has dared to reveal himself to us as Father in order to make clear to us his personal nature. We do not worship an abstract concept that can be molded to fit our needs, but a personal God who freely chooses us and adopts us as his children. God created everything that exists, including men and women who are created in God's own image. We believe that God's perfect creation has fallen through human sin. We sin when through pride we seek to put ourselves in God's place, or when through sloth or false humility we refuse to be the people whom God has called us to be. We are lost and in need of salvation which God gives to all who believe in and confess Jesus Christ as Lord and Savior."*

These new weapons will use either fusion or fission fuels as their main explosive

charge. In the latter case, the fission process will be used in the subcritical mode, in a nuclear-fission yield-generation mode that is not forbidden by the CTBT. While subcritical fission-burn is not suitable for making high-yield (i.e., kiloton range fission weapons), it is adequate for making fourth generation nuclear weapons with yields in the 1 to 100 tons range. For this type of explosive, the currently preferred technique is to use magnetic compression to increase the density of the fissile material (which may consist of low-quality, reactor-grade plutonium) and a very small amount of antimatter to initiate the subcritical burn. In the case of low-yield nuclear devices using a fusion fuel as the main explosive charge, high-explosive-driven magnetic compression is a rather near-term technology enabling one to realize a pure-fusion explosive with a reasonably good yield-to-weight ratio.

*"Only if you have an apocalyptic view of the future to come would you support our mission, and this explains why most key decision makers on nuclear weapons are carefully chosen among those who do belong to either The Church of Jesus Christ of Latter-day Saints or any other Christian faith. When we opt for Howard Philip "Buck" McKeon or Mike Turner or any other, we do it for a purpose."*

Much better performances may be expected for more sophisticated types of

fourth generation nuclear weapons. Such types will make use of a full range of ad-

vanced nuclear processes that are currently vigorously being investigated: nuclear isomerism, superheavy elements, antimatter, metallic hydrogen, superlasers, etc. Substantial progress has been made on all of them in the past few years. A particular reason for this progress is that, since the collapse of the Soviet Union there has been considerable synergetic interaction between Western scientists and scientists from the former communist States, both among those working in military laboratories and among those working at universities and non-military laboratories. Moreover, as is also the case with ICF, major industrialized countries such as Germany and Japan are investing considerable resources to remain at the forefront of the development of all advanced nuclear processes:

*"We have one and the same enemy: the absence of a real enemy. If there's no enemy the entire world would be stagnated, purposeless, devoid of any meaning. This is true both for us and for them. We need a war if we wish to make the world go around."*

An important common factor in the research and development of these advanced nuclear processes is that they all rely on similar kinds of high-energy beam technologies, using high-intensity laser or particle beams to produce, manipulate, or implode all sorts of new nuclear species and materials.

*"Man remains what he has always been: just dust."*

**Language:** Yid

**Sources used for translation:**

* [A. Gsponer and J.P. Hurni, The Physical Principles of Thermonuclear Explosives, Inertial Confinement Fusion, and the Quest for Fourth Generation Nuclear Weapons, INESAP Technical Report No.1, Presented at the 1997 INESAP Conference, Shanghai, China, 8–10 Sept. 1997, Seventh edition, September 2000.](https://cryptome.org/2014/06/wmd-4th-gen-quest.pdf)
* [YidtoEnglish Translator (Double-Check Work)](https://lingojam.com/YidtoEnglish)

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## [Downing and Retrieval of Anomalous Objects Giselian waferprobes and other nano-UFOs](https://forgottenlanguages-full.forgottenlanguages.org/2016/08/downing-and-retrieval-of-anomalous.html)

We propose a system that will allow us to take the step to interstellar exploration using directed energy propulsion combined with miniature probes including some where we would put an entire spacecraft on a wafer to achieve relativistic flight and allow us to reach nearby stars in a human lifetime. With recent work on wafer scale photonics and directed energy, we can now envision combining these technologies to allow for a realistic approach of sending probes far outside our solar system and to nearby stars. We have to radically rethink our strategy or give up our dreams of reaching the stars, or wait for technology that does not exist:

By leaving the main propulsion system back in Earth orbit (or nearby) and propelling wafer scale highly integrated spacecraft that include cameras, bi-directional optical communications, power and other sensors we can achieve gram scale systems coupled with small laser driven sails to achieve relativistic speeds and traverse the distance to the nearest exoplanets in a human lifetime.While this is not the same as sending humans it is a step towards this goal and more importantly allows us to develop the relevant technological base and the ability to build a single "photon driver" to send out literally millions of low mass probes in a human lifetime. The key to the system lays in the ability to build both the photon driver and the ultra-low mass probe.

***\*S****hest zini tyshi mal ma kree tona ki kami shau ma ause shusht aba theh stut af wade tuno kret stia, syshness wata datz tuno kret soifiss menz ir scho zahi, giegidd direl bams:*

***(\*Translation Note:***Couldn’t find this bit anywhere.***)***

We propose electromagnetic acceleration to achieve relativistic speeds for macroscopic objects though not using conventional accelerators but using light to directly couple to macroscopic objects. This is simply using a very intense light source to accelerate matter. It has the additional advantage of leaving the propulsion source behind to greatly reduce the spacecraft mass. Of course, this has the disadvantage of reducing or eliminating (depending on the system design) maneuverability once accelerated. For many systems this is not acceptable so hybrid systems are proposed as well as pure photon driven systems.

The key to the system lays in the ability to build both the photon driver and the ultra-low mass probe.The key to the system lays in the ability to build the photon driver. For relativistic flight (>0.1 c) development of ultra-low mass probes is also needed. Recent developments now make both of these possible.The photon driver is a laser phased array which eliminates the need to develop one extremely large laser and replaces it with a large number of modest (kW class) laser amplifiers that are inherently phase locked as they are fed by a common seed laser. This approach also eliminates the conventional optics and replaces it with a phased array of small optics that are thin film optical elements. Directed energy propulsion allows a path forward to true interstellar probes. The laser array technology is modular and extensible allowing a logical and well defined roadmap with immediate probe tests to start exploring the interstellar medium on the way to the nearest stars.

The efficiency of the photon drive can be improved by reusing the photons reflected by the spacecraft reflector in an effective optical cavity mode to get multiple photon reflections. This is known as photon recycling. It is not a new concept and dates back several decades but may be of some use for some of our applications. In the case of photon recycling the photons bounce back and forth in an optical cavity one end of which is the spacecraft reflector and the other end is a relatively more massive (referred to here as fixed) mirror. The total power at the spacecraft mirror sets the force on the spacecraft. The total power on the spacecraft mirror is essentially the same as that on the fixed mirror. The combination of the two mirrors forms an optical cavity*.*

As the spacecraft begins to move far away diffraction becomes extremely problematic as do mirror alignment issues, surface scattering, sidelobes and hence photon recycling has much less practical use at large ranges. In addition there is a relativistic effect that is simply the Doppler shifting of the photons off the moving mirrors. This reduces the photon energy and hence momentum on each bounce and ultimately makes photon recycling extremely limited at relativistic speeds even if all other effects are ignored.

For the small very high flux sails, such as the relativistic WaferSat probes, the flux on the reflector becomes so large that metalized reflectors , even with multi layer dielectric coatings become extremely difficult to make. The issue is that the metalized sub structure is not reflective enough so the thermal management becomes a critical problem (sails vaporize). One solution is the remove the metals completely and use a fully dielectric reflector. This is what we propose for the extreme cases of high flux small sails. Glasses designed for fiber optics and other photonic communication applications have extremely low absorption coefficients with ppt (parts per trillion) per micron thickness currently achieved. While the reflection coefficient will not be as large as it is for the metalized cases in general, they are sufficient. Note in this case the absorption takes place in the bulk of the glass of the reflector and dielectric coating while in the metalized plastic and glass case it is absorption in the metal film that is dominant.

An option to be considered is to use a large number of wafer scale spacecraft contained in a larger (but still relatively low mass) "mothership". Upon entry near the target star the mother ship would eject the wafers which would then interconnect with each other and the mothership via an optical link. The larger mothership would then transmit the collected data back to Earth. We envision several hundred "WaferSats", each with their own power (RTG and PV) as well as their own optical communications and photon thruster attitude control.

Each wafer has a mass of about 1 gram and hence a 1 kg mothership could carry perhaps 500 of these and disperse them in a roughly 1AU spacing on a 20x20 array upon entry to allow a much more thorough exploration. Since command and control back to earth is not feasible due to TOF issues the system would have to be autonomous. The disadvantage of this is the “mother ship” has lower speed due to its larger mass.

**Language:** Yid

**Sources used for translation:**

* [T. Brashears, et al., “Directed Energy Interstellar Propulsion of Wafersats”, Proceedings of the SPIE Vol. 9616, Nanophotonics and Macrophotonics for Space Environments IX, 2015.](https://www.researchgate.net/publication/304165679_Directed_Energy_Interstellar_Propulsion_of_WaferSats)
* [Lubin, P., “A Roadmap to Interstellar Flight,” JBIS 2015](https://core.ac.uk/download/pdf/189597206.pd)
  + This one was tricky! This paper was not from the cited sources on Forgotten Languages, but hidden within the acknowledgements & references section of the paper above.
* [YidtoEnglish Translator (Double-Check Work)](https://lingojam.com/YidtoEnglish)

## [The Art of Jamming Gravitational Waves Communications Systems - Taming those who tamed gravity](https://forgottenlanguages-full.forgottenlanguages.org/2016/06/the-art-of-jamming-gravitational-waves.html?m=0)

In this paper we consider a totally different radiation, a radiation that is not easily absorbed: gravitational radiation. Such radiation, like gravity itself, is not absorbed by earth, water or any material substance.

In particular we discuss herein means to generate and detect high-frequency gravitational waves or HFGWs, and how they can be utilized for communication. There are two barriers to their practical utilization: they are extremely difficult to generate (a large power required to generate very weak GWs) and it is extremely difficult to detect weak GWs. We intend to demonstrate theoretically in this paper their phase-coherent generation utilizing an array of in-phase microelectro-mechanical systems or MEMS resonator elements in which the HFGW flux is proportional to the square of the number of elements:

"The magic-like effects observed during the maneouver of a PSV craft are all guidance, navigation, and control related. We achieved instantaneous space displacement in the early 70s, but we never achieved a working weapon engagement system able to destroy selected targets. We are still quite far from using gravitational fields as weapons."

HFGWs are defined as GWs having frequencies in excess of 100 kHz and long-wavelength GW detectors such as LIGO, Virgo and GEO600 cannot sense HFGWs. Global communications by means of HFGWs would be the ultimate wireless system.

We intend to demonstrate theoretically in this paper their phase-coherent generation utilizing an array of in-phase microelectro-mechanical systems or MEMS resonator elements in which the HFGW flux is proportional to the square of the number of elements. This process solves the transmitter difficulty. The use of a new, but well documented in peer- reviewed literature, effect discovered by Fangyu Li solves the detection difficulty. This Li-effect is the basis for the very sensitive Li-Baker HFGW detector, **\*designed by Robert Baker and developed jointly by United States and Chinese HFGW research teams.** As documented in peer-reviewed literature, such a detector has sensitivity more than sufficient to receive the transmitted HFGW signal at a significant distance from the transmitter. Dehnen in Germany showed in an article that HFGWs could be generated in the laboratory, using General Relativity, through the use of crystal oscillators:

***(\*Translation Note:*** *The author left this part of the sentence out; however, I added it back in because I found it interesting.****)***

"There seems to be very little offered for the success of gravitational control weapons. If you can destroy a multi-billion dollar Mil-Orb with just a FGM-148 Javelin man-portable missile, the entire thing is worthless. In my view, we should proceed with the technology transfer to the civilian sector, giving them the means to build mhd airplanes and space vehicles. For us gravity propulsion is just another tool in our toolbox, but is neither the ultimate weapon, nor the ultimate defense system."

The critical element in Dehnen’s HFGW generator or transmitter had been the large size and power requirements of his crystal oscillators. This difficulty is removed through the use of modern MEMS technology. There have been other challenges to HFGW communications based upon the mistaken belief that GW generators or transmitters can only be designed using spinning rods.

The utilization of modern MEMS technology and a double-helix array of them would allow for the construction of a HFGW generator or transmitter involving superradiance that exhibits sufficient strength to transmit HFGW signals globally. This is possible even though the conversion rate of EM power to GW power is exceedingly small and, like EM radiation, the GW signal power falls off as the inverse square of the distance. It is shown herein that a properly designed double-helix array of MEMS (or FBARS) can generate sufficient power to reach a receiver on the opposite side of the globe. Three HFGW detectors or HFGW receivers have previously been fabricated and others theoretically proposed, but analyses of their sensitivity suggest that for meaningful HFGW reception, greater sensitivity is necessary. The theoretical sensitivity of the Li-Baker HFGW detector discussed herein, that is based upon a different measurement technique than the other detectors, is predicted to satisfy HFGW communication needs. The detector can be built from off-the-shelf, readily available components and, when coupled with the double-helix MEMS or FBAR array transmitter, could provide for transglobal HFGW communications:

"The main hindrance in the design of advanced Mil-Orbs and PSVs came not from the propulsion system; gravity has been finally tamed and you can see military crafts silently hovering and moving all over the intel battle field. The problem is the onboard communications system. If all your comms is based on electromagnetic waves, how can you use that comms with a gravitational-field-based vehicle that is high in electromagnetic interference?"

Of the applications of high-frequency gravitational waves (HFGWs) communication appears to be the most important and most immediate. Gravitational waves have a very low cross section for absorption by normal matter, so high-frequency waves could, in principle, carry significant information content with effectively no absorption unlike electromagnetic (EM) waves. Multi-channel HFGW communications can be both pointto-point (for example, to deeply submerged submarines) and point-to-multipoint, like cell phones. HFGWs pass through all ordinary material things without attenuation and represent the ultimate wireless system. One could communicate directly through the Earth from Moscow in Russia to Caracas in Venezuela-without the need for fiber optic cabiesl microwave relays, or satellite transponders:

"Magnetohydrodynamic probes are acoustically silent, but visually noisy: you see them from far away. They can only be controlled using modulated gravitational waves, and this is where we need to focus: how to jam and interfere with those HFGWs to neutralize those targets. Now that we've built those nice Mil-Orbs, we need to learn how to destroy them should our enemies learn tomorrow how to build them, too"

Antennas, cables, and phone lines would be things of the past. A timing standard alone, provided by HFGW stations around the globe, could result in a multi-billion dollar savings in conventional telecom

systems over ten years, according to a recent analysis. The communication and navigation needs of future magneto hydrodynamic (MHD) aerospace vehicles, such as the MHD aerodyne (www.mhdprospects.com). Which is high in electromagnetic interference, similar to plasma interference seen at reentry, would be another possible applications area for HFGW communications:

"PSV-MilOrb-2035 Presence was extensively tested in the Fort Worth and Arlington test areas in 2008. We tested new ways to interfere its GNC and OBC subsystems by chasing the vehicle with two F-16 fitted with Li-Baker HFGW jammers. We concluded there is no need to actually detect a covert gravitational wave communication link prior to its jamming. Rather, it is better to simply sweep the search area with HFGWs at random."

**Sources used for translation:**

* [High-Frequency Gravitational Wave Communications - Defense Intelligence Reference Document (Acquisition Threat Support)](https://documents2.theblackvault.com/documents/dia/AAWSAP-DIRDs/DIRD_21-DIRD_High-Frequency_Gravitational_Wave_Communications.pdf)
* [Baker, Robert & Baker, Bonnie. (2012). The Utilization of High-Frequency Gravitational Waves for Global Communications. Journal of Systemics, Cybernetics and Informatics. 10.](https://www.researchgate.net/publication/267849287_The_Utilization_of_High-Frequency_Gravitational_Waves_for_Global_Communications)
* [YidtoEnglish Translator (Double-Check Work)](https://lingojam.com/YidtoEnglish)

**Note:** The unclassified Defense Intelligence report was found on **Blackvault** - the FOIA request, submitted on **March 25, 2022** is [here](https://documents2.theblackvault.com/documents/dia/AAWSAP-DIRDs/FOIA%2000159-2018.pdf). All the other documents related to that request are [here](https://documents2.theblackvault.com/documents/dia/AAWSAP-DIRDs/).

## [MH370 and the Biodoctrine - Passenger 57](https://forgottenlanguages-full.forgottenlanguages.org/2018/05/mh370-and-biodoctrine-passenger-57.html?m=0)

[Recovered from press:](https://www.science.org/content/article/new-killer-virus-china) "In June 2012, three men removing slag from a derelict copper mine in southwestern China fell ill with severe pneumonia and died. Six months later, researchers went spelunking in the mine—an artificial cave hewn from a hillside—in search of pathogens. After taking anal swabs from bats, rats, and musk shrews living in the cave, the team has discovered what it says is a new virus that may have felled the workers."

[Recovered from press:](https://www.science.org/content/article/new-killer-virus-china) "The new virus, named Mojiang paramyxovirus (MojV) after the county in Yunnan province where it was found, joins a growing list of species that share genetic similarities with henipaviruses and members of the Paramyxoviridae family that includes henipaviruses."