iJRASET
International Journal For Research in Applied Science and Engineering Technology

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 5 **Issue:** VIII **Month of publication:** August 2017

DOI: http://doi.org/10.22214/ijraset.2017.8059

www.ijraset.com

Call: 08813907089 | E-mail ID: ijraset@gmail.com

International Journal for Research in Applied Science & Engineering Technology (IJRASET)
ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor:6.887
Volume 5 Issue VIII, August 2017- Available at www.ijraset.com

Review Paper on Future of Antigravity and Antigravity Propulsion

Rohit Hankare[1], Rohan Easwaran[2], Vinit Mhatre[3], Upesh Yadav, Pratik Utekar[5], Shankar Sawant[6], Shravan Nair[7], Sayandeep Khamrai[8]
Department of Mechanical Engineering Lokmanya Tilak College of Engineering, Koparkhairne, Navi Mumbai 400709, India.

Abstract :Antigravity is a state of object or place which is free from gravitational force or a state at which there is absence of gravity. This paper introduces the earlier antigravity theories and advanced unconventional propulsion techniques. At present day, launch cost are very high $10,000 to $ 25,000 per kilogram from earth to low earth orbit, to overcome this non-rocket space launch can be used. These methods are cheaper and more reliable than the conventional space launch techniques. Once satellite overcome the earth's gravitational field, satellites can use non-rocket based methods of propulsion like Ion Thrusters. They have a higher propellant efficiency and potential maximum velocity than propulsion through conventional rockets.
Keywords: Unconventional propulsion, Space launch, Propellant efficiency, Potential maximum velocity

I. INTRODUCTION

Antigravity is the future of space propulsion. Today in 21st century there is a need of better and better development in any field. Most of the scientist claim that negative gravity cannot be generated artificially. After the first world war a French scientist, Elie Cartan has formulated a derivative of the General Relativity Theory, which is known as 'Einstein-Carton Theory'. This theory states that negative gravity can also be found. Carton carried out some experiments, according to him spinning mass or twisting of fields will generate antigravity. That didn't work out as he thought but he continued his research project. Scientist made a little change in the experiment, they used superconductor spinning in a strong magnetic field. The results were found in March of 2006 were unbelievable. Scientist were in shock because of what they have found. They had found that material used during the experiment had lost its weight, which is directly proportional to the speed of rotation. During these experiments, the object used has just levitate some distance above the surface. They wanted it to fly but unfortunately it didn't work out with superconductors.

Superconductors do not withstand higher intensities of magnetic fields and higher angular speed of twisted fields. After so much of hard work scientist have found an alternative for superconductors. Superconductors were exchanged by substance known as 'Plasma Vortices' (plasma = ionized gas). They look promising for two reasons. One is that the achieved by spinning ions of plasma are of order 100,00 times higher than the speed limit for ceramic superconductors. Secondly, Plasma can virtually hold strong magnetic fields. It is possible to generate a tremendous magnetic field up to million times stronger than superconductors.

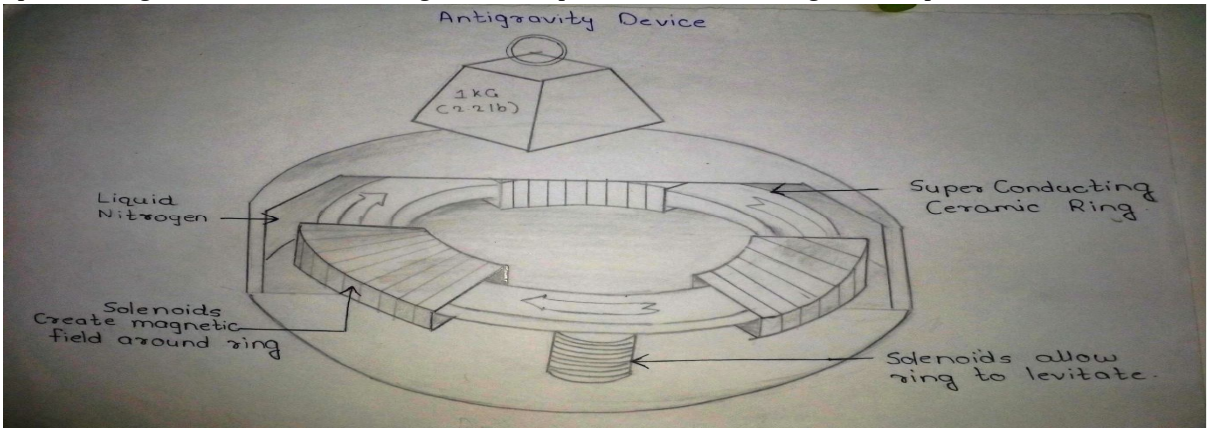


Fig.1
(Fig. 1 represents the antigravity device developed by the scientists and engineers.)

II. LITERATURE REVIEW

This is modern theory which throws light on new breakthrough innovation of non-rocket space launches. This is proposed to

decrease the use of traditional rocket system by using new inertial propulsive system or by using hybrid new antigravity systems in conjunction with traditional rockets which gives low power.

We need much cheaper launch costs as well as we need to find a way from which we can reduce the damage to the atmosphere from thousands of launches. One additional help it can provide us by space disposal of the radioactive waste. The idea was after overcoming the Earth's gravitational field barrier, vehicles may use other non-rocket based propulsion methods. Eg. 'Ion thrusters' which have high propellant efficiency and potential maximum velocity than conventional rocket propulsion system but still not suitable for the space launches.

A. Einstein's antigravity (4)-

*1) Discovery of Nick Cook and John Derings's speculation:*In his best-selling book, 'THE HUNT FOR ZERO POINT', cook has mention about a secret NAZI weapon (NAZI BELL). This device was constructed by a scientific team under SS General 'Hans Kammler' under veil of secrecy. He started a research project on this device. Cook found that a specific design or application of Nazi Bell device can apparently create various startling effects on nearby objects. This device was designed to use high-speed counter-rotating components filled with specialized materials and energized by electromagnetic energy to generate 'torsion' effects and thus control gravity.John Dering, a physicist speculates that German WW-2 research was intended to create a powerful propulsion effect by using Einstein's Unified Field Theory (UFT) equations. In 1929, they found that the 'vector magnetic potential' and 'torsion' are somehow interconnected to each other. According to this theory by using electromagnetic interactions we can generate torsion, which can then null out gravitation. In early 1920's Einstein and others started to speculate that general relativity, which describes gravitation and space-time. Einstein wants to show that the laws of electricity and magnetism could be 'unified' with the laws of gravitation. Thus, with a new hope of making a high-performance flying disk using laws of electromagnetism over failed flying rotating disks.

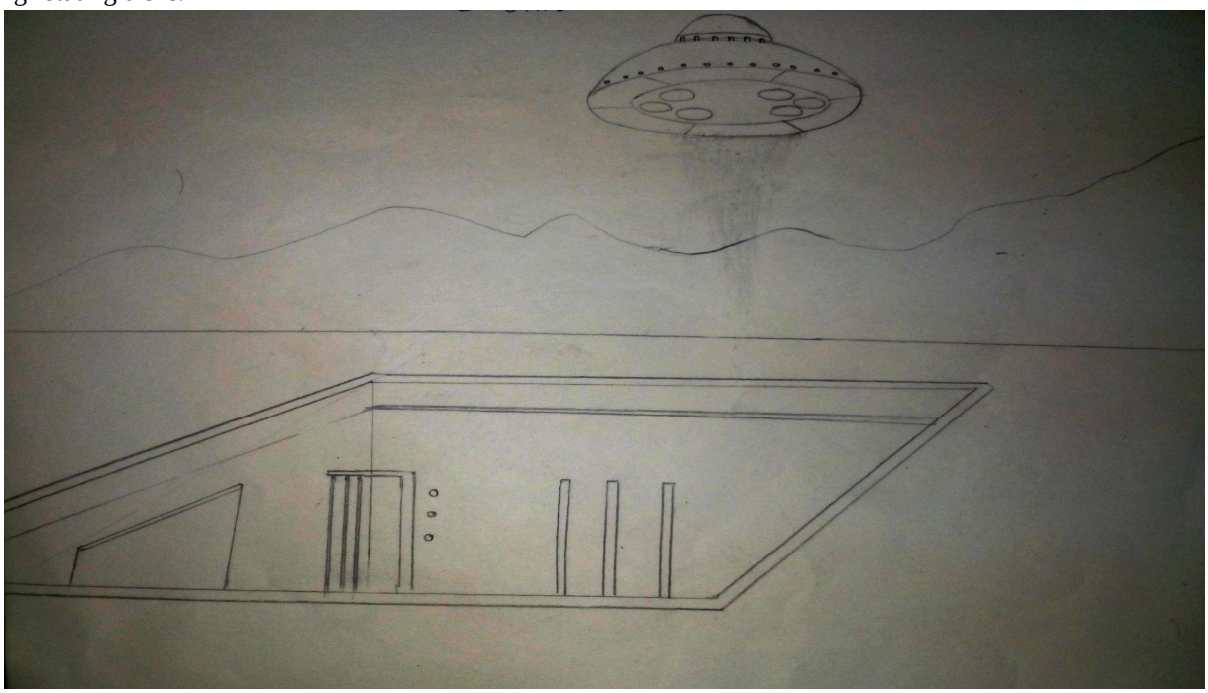


Fig. 2

(Fig. 2 represent the flying disks hypothetical concept which was developed in WW2)

*2) RESULT AND DISCUSSION:*World war 2 era experimentation with Einstein's Unified Field Theory gave a lesson that these forces can be so hazardous or dangerous if careless or sloppy approach is taken in evolving them. The crew of USS Eldbridge apparently was representative of the biological hazard to humans or livings, even Nazi Bell experiments had caused damage. Dering was the person who throws light on these harmful effects. He used phrase "When you pull the cat's tail you get the whole cat", by which he meant that Unified Field Theory deals with multiple forces by deviating the spacetime manifold, damaging with a single force i.e. Gravity.

In Dering's perspective, the most important factor for producing Antigravity effects mainly focussed on the scale and intensity. "The Nazi Bell device was made of 2 counter-rotating cylindrical containers. The containers were placed one above the other approximately about 1 metre diameter and were filled with cryogenically cooled and frozen mercury metal. There was a frozen core present made of a metallic paste, which acts as 'highly permeable material' for the EMG (electromagnetic-gravitational) field Theoretically, the rotation in the Bell device throws light on the idea of torsion fields being used to create a shear effect on space-time manifold surrounding the device. It involves modifying the properties of time and space around the device, which can produce a propulsive Antigravity effect. Primary reasons for hemispherical shape of the bell device was to reduce the gravitational force from non-zero divergence of currents.

B. The theory of antiravity (9)

1) Experiments And Speculation: earlier time, the concept of 'Antigravity' was just theoretical. There was a lack of interest in physicist. After many theoretical calculations and wild imaginations, they have some hope in this field. Scientist proposed that lets try out experimentation on flywheel. They started spinning that flywheel in vacuum about vertical axis. They have found that there was reduction in the weight of flywheel. The reduced weight in a measure directly proportional to the speed of spinning. This experiment was performed in laboratory of Japan.

The levitation or propulsion effect comes from a different unbalanced force which is developed due to absence of the centrifugal effects. Due to this axis of rotation gets precess. Vacuum plays a vital role in this experiment. In the first case, dynamic action of flywheel is caused by the effect of an electric or magnetic field that can act across the empty space producing a thrust. The thrust could be directed horizontal or vertical to counter balance the force of gravity.

In the second case, levitational effects are considered as issues, because the mass property and weight property can become separated to cause mass to lose weight. The scientists believe that both these effects are present together. Very few scientists who have seen the demonstrations are inclined to believe that this phenomenon is true while some are still confused and looking for answers they have yet to find. Still a lot of things were based on assumptions

An experiment was demonstrated to author by Eric Laithaite at the Imperial College of Science and Technology in London tells that a flywheel was spinning on shaft which have a pointed end supported on a very smooth, frictionless surface. which precess at the point of support without the lateral slipping. It shows that there is a centrifugal force which effects the precessional motion at the point of support. There was no other way this experiment could have been possible unless flywheel becomes weightless (weight of the flywheel eventually becomes zero), because the supporting shaft is quite heavy too.

*2) Result And Discussion:*If a body has a mass and mass is acted under the influence of the force of gravity, how can that mass ever lose its weight. It's a big question. It must be the antigravitational force acting upwards. We now bring the theory of 'gravitons', the universal constant of gravitation is a function of gravitons. The transient gravitons which were created from the vacuum background in the surroundings of particles which starts to decay as they transfer their energy and momentum to the lattice system.

In a normal body at a rest or one in the steady state motion, the functioning of the gravitation starts with the creation of gravitons of energy Mc^2. These gravitons fall under their mutual action under the gravitational force but they have very short life. Gravitons are formed by the energy borrowed from vacuum state. It means that we cannot see gravitons as mass but we can sense them due to their gravitational action. There are two types of precession, free and force precession. The force couple provided by the force of gravity via the reduced weight of flywheel causing the precession and this called as 'free precession'. However, if we apply a couple which causes the movement of the shaft at a different angular speed and this is known as 'forced precession'

C. The German approach to antigravity (11)

1) Experiments And Speculation: In physics, there is a theory that fields and time-space cannot be separated from each other. You cannot create a field without time-space or cannot create time-space without any forcefields. Physicists had discovered that there is coupling between fields and space. There is a possibility that we can separate space or its frame of reference by separating the fields (according to the Einstein). It can provide you shielding effect from the influence of gravity from external sources. We know that superconductors have very interesting characteristics, namely they can separate their interiors from the external magnetic fields around them. It's a total separation. This concludes that spinning of mass is not as important factor as the separation of fields. But the scientists have found some limitations of using superconductors. Unfortunately, they cannot withstand strong magnetic fields, losing some of their characteristics when subjected to strong fields. They cannot be accelerated at higher working speeds because they are not resistant to mechanical stresses. The discovery of the separation of magnetic fields on the surface of superconductors in the 30's. In 1935, the brothers Fritz and Heinz London derived the main causes. We know that Germany was the Fatherland of

quantum physics.

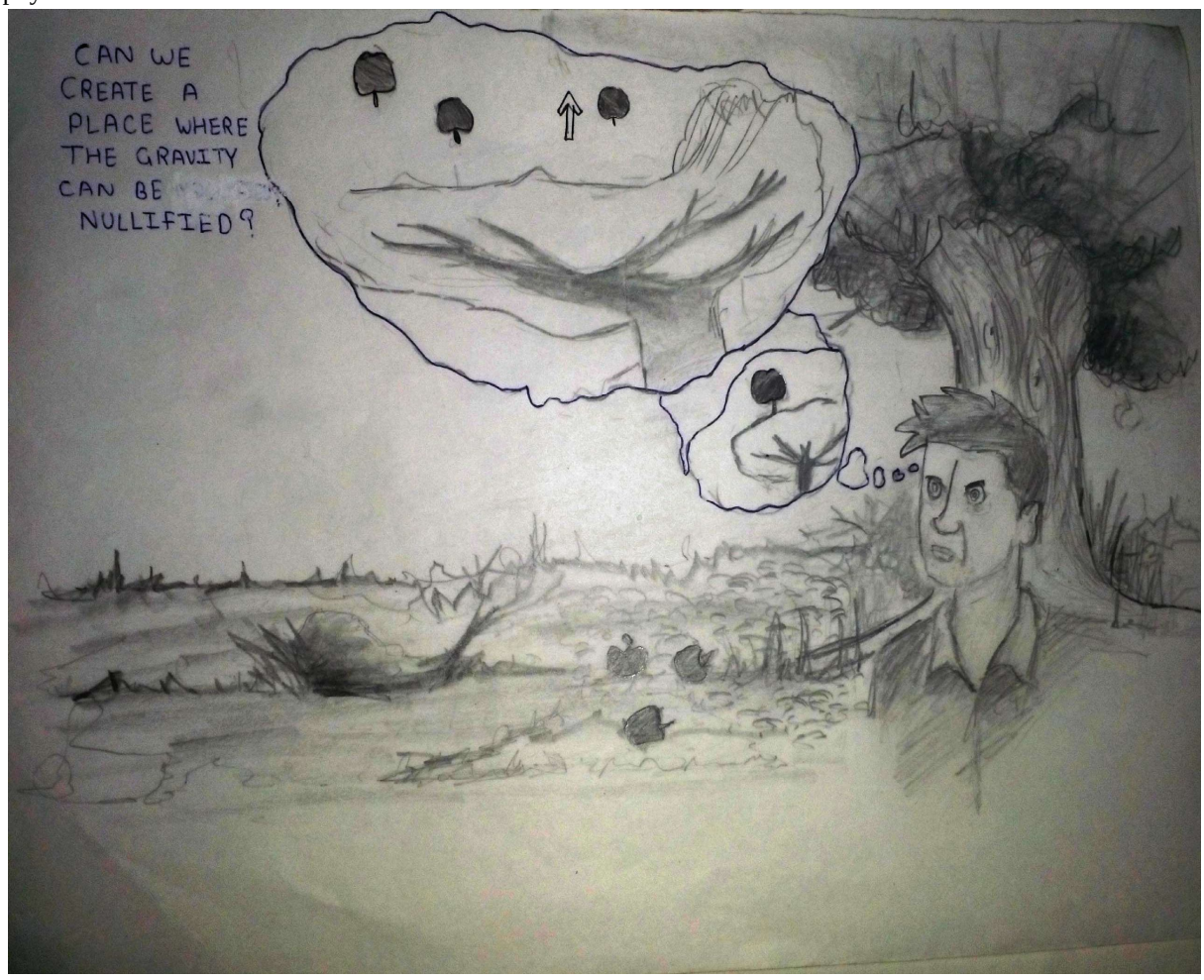


Fig. 3

The physical structure of the 'Bell project' was managed by professor 'Walter Gerlach', one of the best scientists of that time. He became famous because of his 'Stern-Gerlach experiment' in the 1920's. In that experiment, he has studied the spins of atomic nuclei in a strong magnetic field. After some time but still before the war, he just interchanged his interest. He started experimenting with mercuric plasma (ionized mercury vapours), which is kind of same plasma which was used in the 'Bell' experiment. From his observations and conclusions of the ball lightening, this was link with the vortices with quantum gravity. He got help from the best gravity researcher in Germany, Professor 'Pascual Jordan', but even got more important help of a Soviet physicist, 'Poitr Kapitsa'. Kapista has newly discovered the theory of solitons for which he got a Nobel Prize.

*2) Results And Discussion:*When the device was turned on, it generated strong and catastrophic radiation. Some could be explained by concepts of modern accelerators (neutron radiation, X-rays etc) while some others remain unexplained. The device was cylindrical in shape and rounded at the top, covered with white ceramic, around 2.5 m high and 1 m wide. The ceramic covered core round which two cylindrical chambers were spinning on over the other. The cylindrical chambers have same amount of mercury. Mercury gets evaporated and ionized, because of the harmful radiations which were coming out. The project was carried out by aegis of the SS (SS-fuhrungshauptamt) as well as it was a joint undertaking of the regular armed forces.

D. From anti-gravity to zero-point energy (8):

1) Experiments And Speculations: Since 1950's the idea of mechanical antigravity has been proposed. The research was started on the alternative setups for antigravity propulsion techniques. After a lot of research nearly about 26 years in this field scientists have found something. Because of 26 years of intensive research scientists and engineers have finally came up with an invention. This new mechanism was consisting of 2 motors. When the rotations of the motors are combined to produce the centrifugal forces in the

desired direction, in this way antigravity propulsion is achieved in the mechanism.

Traditional propulsion technologies require fixed medium or reaction plane (e.g. photon Sail) or fixed energy source (electromagnetic RF levitation) or shed mass during levitation (e.g. Jet Engine). Advanced or conventional propulsion technologies generally doesn't need physical medium/reaction plane nor shed mass and may or may not carry their own energy source. This is known as Space Coupling or Field propulsion system.

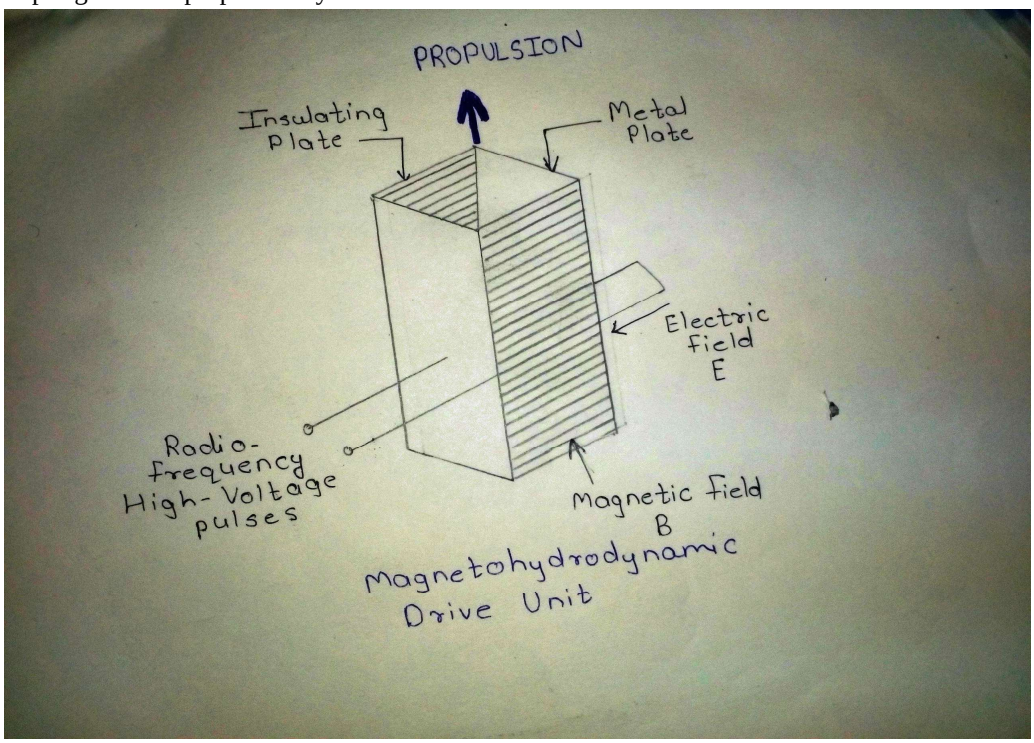


Fig. 4

(Fig. 4 represents propulsion technique used)

If we merged electro-gravitics with electronics and nuclear physics, several other hypotheses have been made. Finding new ways super or anti-gravitational properties by nuclear oscillation phase-locking, radiation reactions and self-acceleration of the dipole, paramagnetic (electron) spin resonance -induced gravity decoupling, different theories on gravitational components and components including in Maxwell equations. After this scientist starts looking for the so called 'zero point'

They have started working on the energy to provide a fair amount of power to the future cosmic ships. All propulsion concepts and theories other than traditional chemical rocket propulsion which is used by the air force and NASA presently.

2) Results And Discussion: Violation of conservation of momentum is the common objection of this type propulsion system. Outer space is not empty but it is filled with radiation including microwave background as well as gravity, may produce zero-point vacuum. Space and Time are very homogenous to each other. We can find out the instantaneous displacement in time and space due to the similarities. We cannot find out instantaneous rotation because the isotropy of space is not uniform.

SPACE WARPS are generally considered as the most advanced transportation concept, these theories suggest that travelling over the intergalactic distances or space is may be possible due to the 'Resonant field' or 'Hyperspace jump' using hypothetical interconnections between the universe, but if very large energy get concentrated at small region of space can create a worm hole. This would create a tunnel through hyperspace. The scientists from California institute of technology have claimed that stable structures can exist given at a particular EM configuration and that this can result in kind of building a time machine!

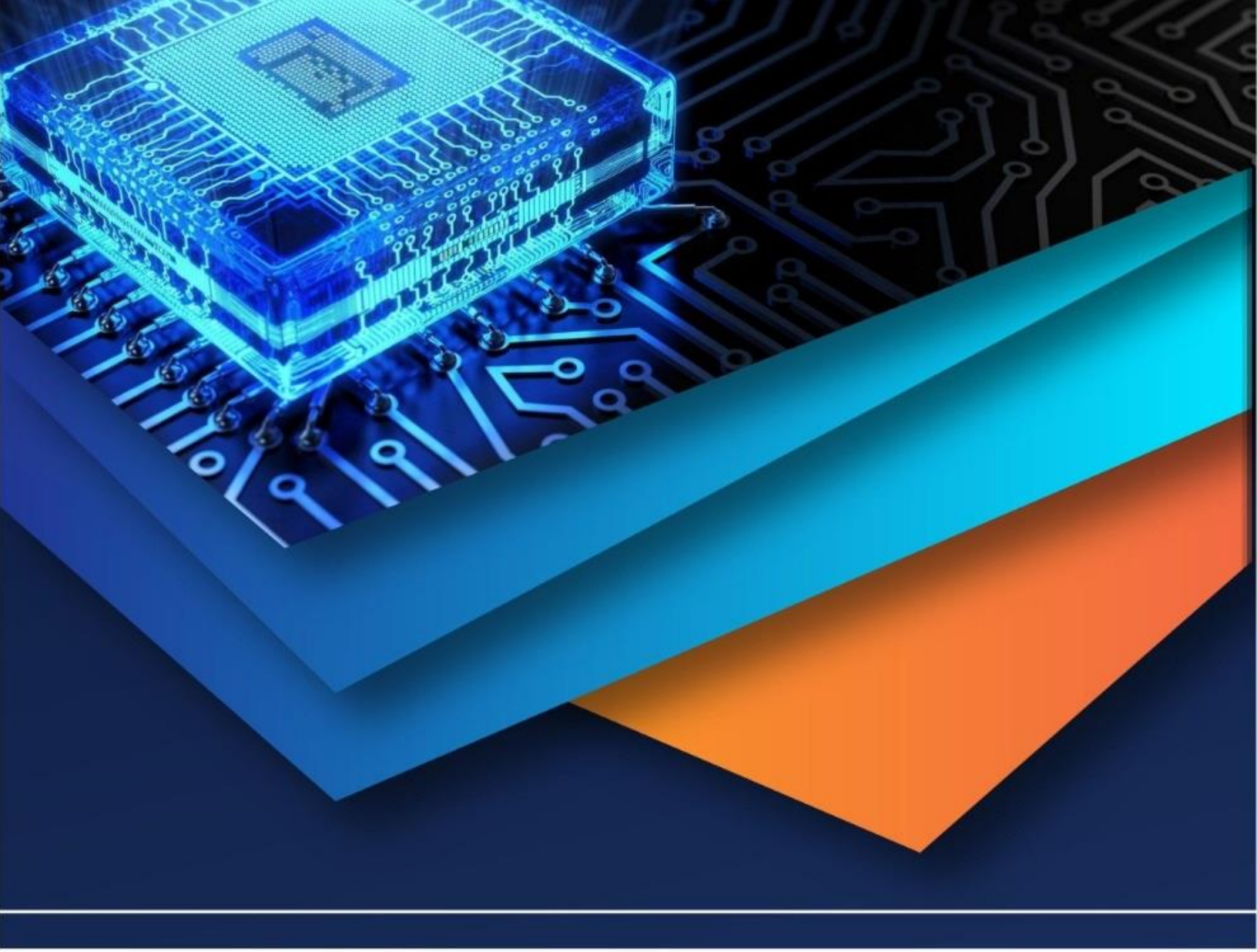
III. CONCLUSION

In conclusion, the different innovations and the theories are integrated proposal for the success they achieved in the field of the antigravity as well as the propulsion. It appears that most practical advanced propulsion system cannot come from the current direction of high energy particles (with weak and strong forces), but from electromagnetism along with gravitational interactions. These can reveal many salient features to engineering solutions. We can believe that new antigravity propulsion ideas can open new

horizons in the field of propulsion.

REFERENCES

[1] Oleson, S.R., And Sankovic, J.M., "Advanced Hall Electric Propulsion for future In-Space Transportation, "NASA/TM-2001-210676, 2001
[2] Tajmar, M., Advanced Space Propulsion Systems, Springer, New York 2002
[3] Hauser, J., and Dröscher, W., "Gravitational Space Propulsion," Proceedings of the 45th AIAA/ASME/SAE/ASEE Joint Propulsion Conference & Exhibit, Colorado, 2009, Paper AIAA-2009-5069.
[4] "The Hunt for Zero Point", Nick Cook, Random house, 2002
[5] "The Philadelphia experiment"
[6] William Moore & Charles Berlitz, 1979
[7] Einstein's Unified Field Theory (online translation for 1920's publication, English and German)
[8] D.L. Cravens," Exploring the Notion Space Coupling Propulsion" NASA Symp. "Vision 21" Space Travel for the next Millennium, NASA LeRC, Cleveland.
[9] H. Aspden, Phys. Lett A 111,22 (1985)
[10] H. Hayasaka and S. Tackeuchi, Phys. Rev. Lett 63,2701 (1989)
[11] The German approach to antigravity - Igor Witkowski



10.22214/IJRASET

45.98

IMPACT FACTOR: 7.129

IMPACT FACTOR: 7.429

INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY