



## SDI (Strategic-Defense Initiative): Is it Only a Defensive Tool or Can it be used for Offensive Missions?

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**Abstract** – SDI (Strategic-Defense Initiative) is a satellite-based-laser system, which can destroy incoming enemy missiles by firing high-energy-laser beam. It can be used as offensive weapon, too. The author discussed this issue with the 1967 Physics Nobel Laureate, Hans Albrecht Bethe during his visit to Department of Physics and Astronomy, the Johns Hopkins University, Baltimore, Maryland, United States. He affirmed that SDI could, definitely, be used as an offensive weapon. A laser beam fired on enemy territory, could start fires. The author, who wrote his MSc thesis, published research and prepared a comprehensive historical memoir in ‘special theory of relativity’ (proposed in 2009 the most general coördinate transformations, the scaled-Poincaré transformations, after 104 years, when Henri Poincaré put forward his generalized transformations), concluded through his analysis that the upper limit for signal-transmission velocity (velocity of light in free space), derived from principle of causality, does not hold for the satellite-fired-laser-beam velocity. This means that if city ‘A’ is destroyed by such a beam, it cannot communicate to city ‘B’ about its own destruction before city ‘B’, itself, is destroyed. Hence, this seems to be one of the most dangerous technologies, available in the modern-day-war scenario. These technologies may be countered by (a) use of killer satellites to take out the laser-beam-firing satellites using the inverse-Lambert scheme, the inverse-Q system and the extended-Q system; (b) the killer-laser-beam-system based on ground (3 such laser sources are needed with advanced position sensing-and-computing system) to burn these satellites in space or, better still, (c) changing the attitudes (coördinates representing orientation) of the laser-beam-firing satellites, to render them useless. An aggressive program to develop defenses against these technologies is need of the hour.

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**Keywords** – High-energy-laser beam, Guidance schemes, Killer satellites, Principle of causality, Special theory of relativity

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