

## LITERATURE SURVEY

S. No.	Title	Year	Author	Publication	Remarks
1	Inflatable Structures Technology Development Overview	1995	Dr. Costa Cassapakis and Dr. Mitch Thomas	Space Programs and Technologies Conference	In 1995, Cassapakis and Thomas (1995) provided a historical perspective on the development of inflated satellite technology. Their paper covers topics such as design variables for building large, inflated craft; thoughts on new deployment and rigidization techniques; multiple applications for large, inflated craft (such as satellites, space targets, decoys, and antennae); and most importantly, lessons learned from their research and areas of research most deserving of further attention
2	TeraHertz Astronomy	2015	Christopher K. Walker	CRC Press	Terahertz (THz) observations of interstellar atoms, molecules, and dust serve as powerful probes of the conditions within the interstellar medium that permeates our galaxy, providing insights into the origins of stars, and planets, galaxies, and the Universe. Terahertz Astronomy explores THz astrophysics and the technologies that make this rapidly evolving field possible.
3	The Detection of Light	2009	Rieke G	Cambridge University Press	Detection of Light provides a comprehensive overview of the important approaches to photon detection from the ultraviolet to the submillimetre spectral regions. It introduced types of detectors such as superconducting tunnel junctions, hot electron bolometer mixers, and fully depleted CCDs, and also includes historically important devices such as photographic plates.

4	Developments for coating testing and aligning Cherenkov Telescope Array mirrors in Tübingen	2013	A. Bonardi et al	Cosmic Ray Conference	The Cherenkov Telescope Array (CTA) is the next generation's very-high-energy gamma-ray air-shower Cherenkov observatory. CTA will consist of many segmented-mirror telescopes of three different diameters, placed in two arrays, one in the Northern hemisphere and one in the South, thus covering the whole sky.
5	Feasibility of utilizing the CTA gamma-ray telescopes as free-space optical communication ground stations	2013	A. Carrasco-Casado, M. Valera, R. Vergaz, and J. F. Cabrero	Applied Optics	In this paper, a proposal has been made to reutilize the technology developed in the gamma-ray telescopes of the CTA project for the implementation of enhanced optical ground stations to support missions that could span from LEO to deep space and could extend the range of distance and performance of free-space optical communications.
6	The Echo I Inflation System	1994	Clemmons D	National Aeronautics and Space Administration	A study has been made to determine the feasibility and selection of a subliming organic compound for inflating the Echo I satellite in a circular orbit at an altitude of 1668 kilometers. Detailed investigations have been made with regard to temperature variations of the satellite while in the sunlight and shadow, the deforming loads present in the environment of space, the rate of hole growth due to micrometeoroid bombardment, a method of selecting the proper subliming compounds, as well as the pressure time history and mass flow rate of the subliming compound vapours out of the satellite.
7	Cosmological Perturbation Theory and	2001	Bertschinger, E	Applied Optics	These lecture notes discuss several topics in the physics of cosmic structure formation starting from the evolution of

	Structure Formation				small-amplitude fluctuations in the radiation-dominated era. The topics include relativistic cosmological perturbation theory with the scalar-vector-tensor decomposition, the evolution of adiabatic and isentropic initial fluctuations, microwave background anisotropy, spatial and angular power spectra, the cold dark matter linear transfer function, Press-Schechter theory, and a brief introduction to numerical simulation methods.
8	The evolution of technology in the deep space network: A history of the advanced systems program	1997	J. W. Layland and L. L. Rauch	The Telecommunications and Data Acquisition Progress Report	This article presents a survey of the principal efforts of the DSN Advanced Systems Program and its impact on the operational Deep Space Network from about 1960 to 1995. The article is structured along two main themes. First is a tour of the fundamental services provided by the Network and the physical elements and technologies that support these services. The second theme is presented as a series of focused case histories of changes inspired by specific missions, such as Galileo, Voyager, or Mariner{Venus{or Mercury, or by specific technologies, such as the application of fiber optics.
9	Determining the Big Bang State Vector	2011	Paul Bird	Semantics Scholar	If it is assumed that the Universe did not start in a singularity and that the laws of physics apply equally to the time 13.75 billion years ago then the Universe at that time should correspond to a wavefunction or state vector. We shall find that this state vector should be very special and highly symmetrical. By making some reasonable assumptions about the initial conditions of the Universe we

					can find state vectors that are candidates for this “Big Bang State Vector”. Once the Big Bang State Vector is found this will help enormously in discussing the events following the Big Bang.
10	Mirror Facet Technologies for the Telescopes of the CTA Observatory	2009	M. Doro, A. Forster, P. Brun, R. Canestrari, P. Chadwick, L. Fontk, M. Ghigo, E. Lorenz, M. Mariotti, J. Niemiec, G. Pareschi, B. Peyaud, K. Seweryn and M. Stodulski	Nuclear Instruments and Methods in Physical Research	This paper describes a study of the behavior of the mirrors in the presence of water vapor condensation. The operational time of a telescope is reduced by the presence of condensation on the mirror surface, therefore, to control and to monitor the formation of condensation is an important issue for IACT observatories. We developed a method based on pictures of the mirrors to identify the areas with water vapor condensation. The method is presented here and we use it to estimate the time and area two mirrors had condensation when exposed to the environmental conditions in the Argentinean site. The study presented here shows important guidelines in the selection procedure of mirror technologies and shows an innovative monitoring tool to be used in future Cherenkov telescopes.