**Astro2020 Science White Paper**

**Solar flares and Quantum Neural Networks**

**Thematic Areas:** ☐Planetary Systems ☐ Star and Planet Formation

☐Formation and Evolution of Compact Objects

Selected option☐ Cosmology and Fundamental Physics

Selected option☐ Stars and Stellar Evolution

☐Resolved Stellar Populations and their Environments ☐Galaxy Evolution

Selected option☐ Multi-Messenger Astronomy and Astrophysics

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**Abstract**:

Solar flare is a gust of solar eruption wind from the surface of the sun. This solar wind travels from the surface of the sun in the form of a beam outwards.

These winds rush outwards from the sun to the various planets and moves outwards towards the regions outside the solar system – away from Uranus, Neptune. As and when the winds approach the planets, the planet’s temperatures rises. Along with the temperature rise, there would be several effects which would be observed. This wind arises due to excessive nuclear fusion giving rise to excessive photons and particles generation.

This leads to the massive outburst and movement of the cosmic particles from the sun’s surface towards the planet Earth – including the other planets as well. Large amounts of hydrogen’s nuclear fusion results in large generation of helium with the energy particles.The effects of solar flares is observed in the cities and on human settlements inhabiting these cities. This is due to the fact that cities are the direct recipients of sunlight and the heat and warmth from the sun rays and also solar flares.

4 Hydrogen -> Helium + Cosmic particles + Photons

This cosmic particles that are generated on the sun, is pushed to move as the solar wind with the photon energy towards the surface of the Earth. A certain region on the sun’s surface generates solar flare. This is directed as a beam onto the Earth. Where this beam strikes the earth at a certain region which is facing the solar wind. In the 20th century, the solar wind created a massive effect on the Earth’s region Quebec. Solar wind affects radio communication, telecommunications and leads to electricity and power loss. In the dark ages, this was not observed because there was no electricity. But if this occurred currently, the effects would definitely be visible!

Neuron is the building block of the human brain. It aims to perform the cognitive functioning of the body of the human. Every neuron comprises of the cosmic particles protons as constituent of certain chemical compounds and elements present within it. This proton is tuned to be in harmony with the protons in the cosmos. Protons in the neurons oscillate with a certain frequency along with the cosmic proton particles. In other words, the human brain is composed of cosmic particles which includes protons which are muons. The entire cosmos is made up of oscillating proton particles which travel the universe in proton beams. Human body is surrounded by the cosmic particles because it is surrounded by the cosmos!

And these cosmic particles constantly collide with the human body – at each and every second! In order to maintain peace and harmony and balance, the quantity of cosmic particles within the human body must oscillate and balance against the external oscillating cosmic particles i.e the universe and its cosmic particles. If there is a slight variation between the quantity of particles in the body and the quantity of the particles in the cosmos, then there could be a possibility of imbalance. Due to the reason of imbalance, there could be occurrence of human ill – health. Ill health could be in the forms of mental illnesses such as Alzheimer’s disease and so on and so forth. Proton beams that arise from the solar wind, enter the earth’s atmosphere and strike with the atmosphere resulting in muons!

These muons enter the human body and act on the health of the individuals – as described above!

Protons + atmosphere -> muons

Muons + human body -> imbalance between

(a) the quantity of the human’s cosmic particles and

(b) the universe’s cosmic particles

Imbalances as depicted above -> Human ill – health such as Alzheimer’s

A product based on the above mentioned observations is mentioned below and it is titled “Solar flares, Heliophysics, Brain – on – chip and Quantum Neural Network Learning/ Response Generation Mobile Application”!

Changes in planetary conditions on Earth with respect to the sun due to solar flares lead to changes in the health of human beings and also a variety of mammals on the Earth. These health changes in the mammals including human beings in the current decade has led to a variety of changes in the atmosphere, in water, on land and so on. These changes affect the neurological functioning of human brain. It could lead to disorders such as Parkinson’s disease and Alzheimer’s disease etc. The current technology usage in life-long neurological disorders is Neural Networks. But it is found that this change modifies the functioning of the nuclei in the neuron in the human brain.

This brings about changes in the motion/ movement of nuclei. The size of the neuron is in dimensions of nano. Such changes in each and every neuron, would lead to the change in the movement/ or distortion in the human brain as a whole. This is apparent when all the neurons – millions in count are aggregated into one unit – which is the human brain. Hence this leads to the malfunctioning of the human brain caused due to it’s distortion. The solution to the problem is a Quantum Neural Network Learning / Response generation Mobile Application. It is created to enable the disabled person suffering from Parkinson’s / Alzheimer’s disease.

And help that disabled person to understand the stimulus that he/she is looking at by his/her visual system. Once the stimulus is fetched from the disabled person – via his visual system [which he is looking at], it is processed in the biological neural network processing system within the mobile application. And an output object is created which can be defined as a response to the stimulus. From the mobile application, this response is displayed to the disabled person. And then this response action is carried out by the disabled person.

Inserting the white paper text here.

**Attaching the white paper on the research article titled**

**“Neutrino Oscillations in Dense Medium: Probing Particle Physics together with Astrophysics and Cosmology”**

**here below:-**

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**References**

**Created a publication on the category Accessibility which is described in – detail in the Wikipedia webpage.**

**The Wiki page publication’s website url/ link is mentioned here below:-**

[**https://en.wikipedia.org/w/index.php?title=User:Ashwinisathnur&oldid=883112617**](https://en.wikipedia.org/w/index.php?title=User:Ashwinisathnur&oldid=883112617)

**Also attaching the above mentioned wiki page’s documentation here below:-**

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