Ambrosial Remarks of Most Revered Gracious Huzur in Diamond Jubilee Memorial Lecture of Dr Spenta Rustom Wadia on February 29, 2020

It is very fascinating indeed. However, Max Planck's number and other things which make it finer and finer starting from $10^{\text{-}35}$ m which ought to be $10^{\text{-}\infty}$ to the power - ∞ ad infinitum. Macrocosmically, it can be verified but would take Science a long time to do it. There is a microcosm too within each human being. And, on the strength of it I can say that while string theory talks about 10 dimensions mainly of the matter and mind, there are 14 microcosmically and we understand them fully well, in the eastern texts of the Saints through Vedas, Upanishads, Bhagvad Gita and so on. So there would indeed be 14 degrees of freedom or independence which you would discover ultimately macrocosmically in the Grand Divisions of matter and mind. But there is another Grand Division of Pure Spirituality that is missed out completely. That is also hierarchical in nature. And that gives another 7 degrees of freedom. So altogether there are 7 each, levels or hierarchies, in the Creational Grand Divisions of Matter, Mind and Pure Spirituality. So that is the crux of it. If we practice what is given in the Discourses of Radhasoami Faith with its revised edition carrying a supplement, it talks about laws of Karmas and other things from a spiritual point of view, but it identifies what we call Ashby's Law of Requisite Variety in General Systems Theory (founded by Late Prof. George Klir). So the requisite variety that we have in each of the Grand Divisions of Matter, Mind and Pure Spirituality is 7 each. And that would be 21 in all. So the String Theory would further have to grow from 10 to 14 to understand the Grand Divisions of Matter and Mind. So that is what I can suggest to you on the basis of the Inner Microcosm. Inner Microcosm (which is completely closed) has degrees of freedom or independence which is 21. On the other hand the Outer Macrocosm too has 21 degrees of freedom. In a sense unexplored yet fully, but in the Grand Divisions of Matter and Mind there are 14 only. So, you may look forward to developing String Theory (based on membranes connected by strings) to reach those four other dimensions of Requisite Variety. Then it would be representing the matter and mind at least, fully. So, that is obvious if you go through these kinds of hyper-transcendental deep meditational techniques which say that



the Macrocosm though completely open has limited degrees of freedom, 21 only, whereas the Macrocosm in its expanse of finer and finer subatomic particles (as given indirectly by Max Plank No. 10^{-35} m) is likely to grow further to $10^{-\infty}$ to the power $-\infty$ to the power $-\infty$ ad infinitum. You have to consider particles that are smaller and smaller in size but larger in dimension. So I think we ought to try and strike a balance for kinetic or dynamic equilibrium as distinct from static states e.g. Electrostatic, Hydrostatic in terms of infinite potential differences that preceded the Big-Bang and associated Black-Holes as explored by basic evolutionary scientists (such as Modern Physics, Chemistry, Biology including Abstract Mathematics of Schrodinger's Quantum Mechanics, propelled by Newtonian General Gravitational Theory particularly Post-Einsteinian Equations as upheld by his followers) and then look for things. So for string theory add another 4 missing dimensions and you would be a great innovator.

Response of Dr Wadia

Thank you very much. So my response is that the 10 dimensions of string theory which we arrive at are within a certain framework. So, if that framework needs modification, then of course, dimensions can be more than 10.

Gracious Huzur (contd.)

Your framework is excellent and that is why I made it a point to come to your talk. We have a revised schedule for today and so I held our morning Satsang at 1:00 AM and then we have been at it. But it has been worth doing it. I have enjoyed every moment of it. I felicitate you for your perceptions and innovative spirit of Modern Scientific Research.