## Cyclic model of universe

Chandan Gupta

Abstract—This 'CYCLIC MODEL OF UNIVERSE' was introduced considering basic fundamental laws, activity and similarity in the nature around us. one assumption has been taken for special attractive forces starts acting from a particular range of very long distance between celestial bodies in the similarity with short ranged NUCLEAR FORCES.

Index—Initial predictions, New introduced model, Solving the various claims arrised, Basis of assumption, Excluded concepts, Basis of exclusion, Acknowledgment

### THEORY OF MODEL

#### 1. INITIAL PREDICTIONS

As it is predicted that initially Big Bang happen! So very small, very dense mass exploded and every matter scattered in all possible random directions, so this phenomenon is still continued till today and the universe is still expanding.

### 2. NEW INTRODUCED MODEL

we know the fundamental law that every matter attract every other matter(Newton's law of gravitation)so i think the whole matter which was scattered in all directions will stop moving apart due to negative acceleration and then again moving under mutual attraction ultimately to become a very dense mass again and then again formed very dense mass will again explode...... And this process will go on.....i.e CYCLIC MODEL OF UNIVERSE.

# 3. SOLVING THE VARIOUS CLAIMS ARISED

Now the claims will be arised that gravitational force is a weak force and does not contribute a very effective attractive forces at a very large distance so that would be seems to be impossible for whole matter was scattered to get retard and stops and starts moving under mutual attraction , so to solve this claim one assumption have been taken - "at a very larger distance

where gravitational force seems to be negligible, some SPECIAL VERY STRONG ATTRACTIVE FORCES starts acting which would be strong enough to retard the whole matter scattered".

### 4. BASIS OF ASSUMPTION

This assumption have been taken in similarity with the strong short ranged NUCLEAR FORCES, which were introduced to solve the problem of reside of protons inside the nucleus in the range of femtometers, these forces were assumed strong enough which could even overcome strong electrostatic repulsion between similar positively charged protons.

### 5. EXCLUDED CONCEPTS

The theoretical concept and explationatory theory of DARK MATTER and DARK ENERGY regarding accelerated expansion of universe have been excluded

### 6. BASIS OF EXCLUSION

DARK MATTER and DARK ENERGY are just only theoretical explanation of accelerated expansion of universe and have no valid proof of its existence.

### 7. ACKNOWLEDGMENT:

I want to thanks the director of my institute for motivating us and my professors Dr Ajay Thakur and Dr Atul thakur for guiding us. CHANDAN GUPTA is currently pursuing Bachelors of Technology (B.Tech.) in department of Mechanical Engineering from a renowned Indian Institution – "Indian Institute of Technology (I.I.T.), Patna, India".

Contacts: Email id - omjigupta2015@gmail.com

chandan.me15@iitp.ac.in

Mob no - +919454223343

