

densest, as in the clusters and the Milky Way; because their close approaches would, on the average, be most frequent.

(2) Spiral nebulae would be especially abundant in the densest masses of stars such as the globular clusters, because close approaches would there attain maximum frequency.

(3) The spiral nebulae should nearly always occur in pairs, for the disruption of one of two passing stars would generally imply the disruption of the other.

These consequences are not actual, and since the theory of probability of collision or approach is extremely slight, quite too slight to account for the hundreds of thousands of spiral nebulae, See holds the theory to be untenable. As a further argument against it, though he affirms it to be unnecessary to thrice slay the slain, he quotes the objection of Miss Clerke that,

"The events contemplated in it are on a small scale by comparison with the grandiose dimensions which we must ascribe to spiral nebulae."

Of the theory proposed by See, only the merest hint can be given. It is called the Capture Theory. Nebulae are formed by the agglomeration of fine dust expelled from the stars by the repulsion or pressure of their light and by the electric forces. This dust collects and begins to condense and develop into a cosmical system. In the nebula a vast number of meteorites are formed by the precipitation of ions, whence small globes develop, and as the mass is widely scattered, each small globe has about it a sphere of influence within which its attraction is supreme. The result is that the small globes grow by accretion, and in time very much augment their masses. This again is a process of capture and consists in augmenting the masses of the bodies forming in a nebula, and in decreasing their number correspondingly. Thus are generated planets and moons. The acceleration of the earth's rotation is due to the fall of cosmical dust, and the resistance of the nebular medium tends to make the orbits approach a circular form.