It is of course well known that one cannot apply the theory of Brownian motion directly to the discussions we have in mind. Indeed there is observational evidence for (7) – we can easily see that (7) holds.

\[ \frac{1}{N} \approx N \]

Let us now consider \( N \sim 10^6 \) constituents in the universe. Then (1) gives the number of particles. (1) gives the elliptical relation with \( \phi \). The relation that in the context of the universe as a whole, \( N \) represents the total events and represents a mean free path \( \phi \). If the events have already been averaged, \( \phi \) holds where \( y \) denotes the dimension of the system, \( N \) the number of steps or steps of (1)

\[ N^y = y \]

It is well known in the theory of the Random Walk or Brownian motion that

**Abstract**

In this brief communication we show why superstructures would not

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motion to stars or even galaxies because they are gravitationally bound. However for superclusters with the huge separating voids, Brownian motion would be a reasonable approximation, as can be seen by the fact that (2) is valid. So it is natural that such superclusters should arise. It is interesting to note also that recently, in a completely different context, it was suggested[5] that there could be a large scale quantization, giving precisely (2) as the quantized length.

References


