

Discussion on determination of volume of ellipsoid using Monte Carlo method.

Volume of the ellipsoid was determined using the Monte Carlo method. Random points were taken in a cuboid boundary and the relationship between the ratios of area of ellipse and cuboid, and ratios of the number of points within the boundary of the figures were used to calculate the volume. While comparing the analytical value with the result and studying the fractional error with step number, the deviation of the value decreased with more number of trials but it was also observed that the error also increased as the step number increased more than a particular value. The result value mainly depends on the random number generator .