

18. Particle 1 has a mass of $M_1 = 10$ kg, and particle 2 has a mass of M_2 , following a normal distribution $N(20, 1^2)$ kg. If they are 2 m apart, what is the distribution of the force of gravity acting between them?

Solution: The distribution is $F \sim N(3.34, 0.17^2)$ nN.