

Q. We can shield a charge from electric fields by putting it inside a hollow conductor. Can we shield a body from the gravitational influence of nearby matter by putting it inside a hollow sphere or by some other means?

Ans. A body cannot be shielded from the gravitational influence of nearby matter, because gravitational force between two point mass bodies is independent of the intervening medium between them.

It is due to the above reason, we cannot shield a body from the gravitational influence of nearby matter by putting it either inside a hollow sphere or by some other means.