Review of: "A direct calculation in the newtonian gravity framework"

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In this note, the respected author gives direct proof of the fact that: The gravitational potential and field of a compact object with a spherically symmetric mass density of total mass M, somewhere outside the object, are the same as if the total mass is pointlike at the center of the sphere.

The calculation is straightforward and satisfactory, however, it is quite well-known. The respected author believes that this theorem has been proved by Gauss's theorem only, while it usually is given as an exercise to undergraduate students in physics, such as myself. Even a quick search on Google reveals the fact that this problem has been well-known without the application of Gauss's theorem.

In conclusion, the subject of the current note is not novel and is not unknown, but still deserves to be stressed for a large percentage of students in physics who don't know the direct proof of the theorem. I believe that such short notes about the heart of classical physics motivate interested students to think again about the very basic theorems in physics.