

Re: Gravitational time dilation within shell

Source: <http://sci.tech-archive.net/Archive/sci.physics.relativity/2008-07/msg03018.html>

- *From:* "Androcles" <Headmaster@xxxxxxxxxxxxxxxxxxxx>
 - *Date:* Thu, 31 Jul 2008 21:01:25 +0100
-

<shalayka@xxxxxxxx> wrote in message

news:3372a5dc-8cef-4684-a045-0074e456b147@xx

| Are the gravitational time dilation experienced by a test particle the
| same for these two setups?

|

| 1) A single gravitating body of mass M at a distance of R from the
| test particle ... $\tau = t \sqrt{1 - 2GM/(Rc^2)}$.

|

| 2) A homogeneous shell of mass M of radius R , where the test particle
| is inside of the shell (doesn't need to be at the centre since $d\tau/dr$
| = 0 inside).

|

| Thanks for any information.

|

| - Shawn

Yes, of course. Now be a good boy and take your medicine.

.