$$V_n(R) = \frac{\pi^{n/2}}{\left(\frac{n}{2}\right)!} R^n$$

$$S_n(R) = \frac{2\pi^{n/2}}{\Gamma\left(\frac{n}{2}\right)} R^{n-1}$$

$$\Gamma(\nu) = (\nu-1)!$$

$$\Gamma\left(\tfrac{n}{2}\right) = \left(\tfrac{n}{2}-1\right)!$$

$$\frac{dV_n(R)}{dR}$$

Zeta

3'

ouwen antelosa

$$E-\tfrac{1}{2}\Delta \;,\; E+\tfrac{1}{2}\Delta$$

$$E-\tfrac{1}{2}\Delta \le \sum_{i=1}^{N} \frac{p_i^2}{2m} \le E+\tfrac{1}{2}\Delta$$

$$2m(E-\tfrac{1}{2}\Delta) < \qquad \le 2m(E+\tfrac{1}{2}\Delta)$$

$$(2mE - m\Delta) \le \qquad \le (2mE + m\Delta)$$

$$\times\, \Delta\left(\frac{m}{2E}\right)^{1/2} = \Delta\left(\frac{m}{2E}\right)^{1/2} \cdot \frac{2\pi^{\frac{3N}{2}}}{\left(\frac{3N}{2}-1\right)!} \cdot (2mE)^{\frac{3N-1}{2}}$$

$$V^N \times$$