LaTeX learning

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Here begins the document.

2 Mathematics

$\mathbb{P}$ any prime numbers
$\mathbb{W}$ any whole numbers
$\mathbb{N}$ any natural numbers
$\mathbb{Z}$ any integer
$\mathbb{I}$ any irrational number
$\mathbb{Q}$ any rational number
$\mathbb{R}$ any real number
Einstein's total relativistic energy of a body:

$$E = \gamma m c^2 \tag{1}$$

$$\gamma = \frac{1}{\sqrt{1 - \frac{v^2}{c^2}}}$$

Using a binomial expansion:

$$E \approx mc^2 + \frac{1}{2}mv^2 \tag{2}$$

Energy of a quantized matter wave in a rigid box:

$$E_n = n^2 \frac{\pi^2 \hbar^2}{2ma^2} \qquad \mathbb{Z} : n = 1, 2, \ldots, \infty \tag{3}$$