Relativistic Coliisions, Decays, and Reactions

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One Minute Paper 0.1. *Before:*

$$P^\mu = (m, 0, 0, 0) \tag{1}$$

After:

$$p_1 - p_2 = p_3 \tag{2}$$

Use relativistic dot product.

$$\gamma = \frac{E}{m} \iff \frac{E}{\sqrt{P \cdot P}} \tag{3}$$