\[ E'_x = E_x \]
\[ E'_y = \gamma (E_y - vB_z) \]
\[ E'_z = \gamma (E_z + vB_y) \]

\[ E_x = E'_x \]
\[ E_y = \gamma (E'_y + vB_z) \]
\[ E_z = \gamma (E'_z - vB_y) \]
\[
E_y = \gamma^2 E_y - \gamma^2 (vB_z) + \gamma v B_z'
\]
\[
yvB_z' = E_y - \gamma^2 E_y + \gamma^2 (vB_z)
\]
\[
B_z' = \frac{E_y}{\gamma v} - \frac{\gamma^2 E_y}{\gamma v} + \frac{\gamma^2 (vB_z)}{\gamma v}
\]
$y^2 = \frac{1}{1 - \frac{v^2}{c^2}}$

$\frac{1}{y^2} = 1 - \frac{v^2}{c^2}$
The diagram shows a series of compartments labeled as $s$, $s'$, and $s''$. There are arrows indicating the direction of flow, with labels $0.9c$ and $0.6$ at certain points. The label $0.9c$ is written above the arrow connecting $s$ to $s'$, indicating a proportion or ratio. The label $0.6$ is shown below the arrow connecting $s'$ to $s''$, suggesting another proportion or ratio. The overall structure appears to illustrate a concept related to flow or transition between the compartments.
\[ B_x' = B_x \]
\[ B_y' = \gamma (B_y + \frac{V}{c^2} E_z) \]
\[ B_z' = \gamma (B_z - \frac{V}{c^2} E_y) \]

\[ B_x = B_x' \]
\[ B_y = \gamma (B_y' - \frac{V}{c^2} E_z') \]
\[ B_z = \gamma (B_z' + \frac{V}{c^2} E_y') \]
\[
\frac{S}{\text{ }}
\]

\[
E_y = 1.25 \ E_0
\]

\[
B_z = 0.75 \ \frac{E_0}{c}
\]

\[
\vec{u} = 0.6c \ \hat{i}
\]

\[
\vec{F} = 0.89 \ E_0 \ \hat{j}
\]
\[ F_y = q E_y \]
$$S''$$

$$E_y'' = \frac{13}{12} E_0'$$

$$B_{2''} = - \frac{5}{12} \frac{E_0'}{c}$$

$$F'' = \frac{12}{13} q' E_0'$$