FORMULARIO

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$$\eta_{\mu\nu} = \begin{bmatrix} 1 & & & 0 \\ & -1 & & \\ & & -1 & \\ 0 & & & -1 \end{bmatrix}$$

$$p^\mu = (m\,c\,\gamma, m\,\gamma\,\vec{\beta})$$

$$\partial_\mu = \eta_{\mu\,\alpha}\,\partial^\alpha$$

$$F^{\alpha\,\beta} = \begin{pmatrix} 0 & -E_x & -E_y & -E_z \\ E_x & 0 & -B_z & B_y \\ E_y & B_z & 0 & -B_x \\ E_t & -B_y & B_x & 0 \end{pmatrix}$$

$$\nabla \cdot \vec{E} = 4\pi\,\rho$$

$$\nabla \wedge \vec{B} - \frac{1}{c}\,\frac{\partial \vec{E}}{\partial t} = \frac{4\pi}{c}\,\vec{J}$$

$$\nabla \cdot \vec{B} = 0$$

$$\nabla \wedge \vec{E} + \frac{1}{c}\,\frac{\partial \vec{B}}{\partial t} = 0$$

$$A^\alpha = (\phi, \vec{A})$$

$$J^\alpha = (c\,\rho, J)$$

$$\partial_\alpha\,F^{\alpha\,\beta} = \frac{4\pi}{c}\,J^\beta$$

$$\partial^\alpha\,F^{\beta\,\gamma} + \partial^\gamma\,F^{\alpha\,\beta} + \partial^\beta\,F^{\gamma\,\alpha} = 0$$

$$\frac{dp^\alpha}{ds} = \frac{q}{c}\,F^{\alpha\,\beta}\,u_\beta$$

$$F^{\alpha\,\beta} = \partial^\alpha\,A^\beta - \partial^\beta\,A^\alpha$$

$$F_{\mu\,\nu} = \partial_\mu\,A_\nu - \partial_\nu\,A_\mu$$

$$\epsilon_{\mu\,\alpha\,\rho\,\gamma}\,\partial_\alpha\,F_{\beta\,\gamma} = 0$$

$$\Lambda^\mu_\nu\,(x,v) = \begin{pmatrix} \gamma & -\gamma\,v/c & 0 & 0 \\ -\gamma\,v/c & \gamma & 0 & 0 \\ 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix}.$$

$$\Lambda^\mu_\nu\,(y,v) = \begin{pmatrix} \gamma & 0 & -\gamma\,v/c & 0 \\ 0 & 1 & 0 & 0 \\ -\gamma\,v/c & 0 & \gamma & 0 \\ 0 & 0 & 0 & 1 \end{pmatrix},$$

$$\Lambda^\mu_\nu\,(z,v) = \begin{pmatrix} \gamma & 0 & 0 & -\gamma\,v/c \\ 0 & 1 & 0 & 0 \\ 0 & 0 & 1 & 0 \\ -\gamma\,v/c & 0 & 0 & \gamma \end{pmatrix}.$$