

New Grammar for a Point Particle System

$\Phi : \{ \chi : \mathbb{R} \rightarrow \mathbb{R}^3 \} \rightarrow \mathbb{C}$ a functional

M_{new}

$M_{\text{new}}(\Phi)$ a history

If

$$\Phi[\chi] = \exp \left[\alpha \int_{-\infty}^{\infty} dt \psi(\chi(t), t) \right]$$

and $\Psi(x, y, z, t) = \exp \psi(x, y, z, t)$,

then $M_{\text{new}}(\Phi) = M_q(\Psi)$.

\therefore The range of $M_{\text{new}} \supset$ The range of M_q