

Coordinate System of the Classical Mechanics for a Point Particle

$\chi: \mathbb{R} \mapsto \mathbb{R}^3$ a function

$$t \xrightarrow{\chi} \chi(t) = (\chi^1(t), \chi^2(t), \chi^3(t))$$

M_c



$M_c(\chi)$ a history

$\forall t;$

[The position of the particle is $D(\chi(t))$
at the time $\text{clock}(t)$.]