

Power Series Space-time

$$\begin{aligned} \Phi[\phi] = & \Phi_0 + \int d^4 x_1 \Phi_1(x_1) \phi(x_1) \\ & + \int d^4 x_1 \int d^4 x_2 \Phi_2(x_1, x_2) \phi(x_1) \phi(x_2) \\ & + \dots \end{aligned}$$

where

$$\begin{aligned} \Phi_0 & \in \mathbb{C} , \quad \Phi_1(x_1) \in \mathbb{C} , \\ \Phi_2(x_1, x_2) & \in \quad , \quad \dots \end{aligned}$$

