

PTVMCDriver: AbstractVariationalDriver

solver: AbstractPE

compression_algorithm: InfidelityCompression

integration_parameters: IntegrationParameters

integrator: Integrator

run: $|\psi_{\theta(0)}\rangle \longrightarrow |\psi_{\theta(T)}\rangle$

Integrator: struct.Pytree

solver: AbstractDiscretization

compression_algorithm: InfidelityCompression

integration_parameters: IntegrationParameters

step: $|\psi_{\theta(t)}\rangle \longrightarrow |\psi_{\theta(t+dt)}\rangle$

AbstractPE: AbstractDiscretization

coefficients: AbstractPE

get_substep: $k \longrightarrow (|\psi_{\theta}\rangle, |\phi\rangle, \hat{U}_k, \hat{V}_k)$

InfidelityCompression: AbstractStateCompression

driver_class: AbstractVariationalDriver

build_parameters: PyTree

run_parameters: PyTree

init_state: $(|\psi_{\theta}\rangle, |\phi\rangle, \hat{U}_k, \hat{V}_k) \longrightarrow \text{driver_instance}$

execute: $\text{driver_instance} \longrightarrow |\psi_{\theta*}\rangle \approx \hat{V}_k^{-1} \hat{U}_k |\phi\rangle$

