

## FINAL STATE

$$X^{(-)} = \langle \phi_B \vec{p}_1 \vec{p}_2 | \Psi_f \rangle$$

$$V = V_{1B} + V_{2B} + V_{12} \quad \leftarrow$$

In The framework of The 3-body scattering Theory

$$|X\rangle = (1 + G_0 T) | \phi^0 \rangle$$

$\uparrow$  free propagator       $\uparrow$  PW

$$G_0 = \frac{1}{z - H_0}$$

$\downarrow$  kin. energy

The scattering amplitude is given by The LS equation

$$T = V + V G_0 T$$