



Higgs phase.

$$\langle H \rangle = H_0 \neq 0$$

$\mathbb{Z}_2$  flux and monopoles expelled.

Emergent  $\mathbb{Z}_2$  gauge field.

Topological order.

$$\langle \Phi \rangle = 0$$

U(1) confined.

Monopoles proliferate.

$$\langle H \rangle = 0$$

No topological order.

$$\langle \Phi \rangle \neq 0$$

$g_c$

$g$

$\tilde{g}$