

Conflict-Free Checker

For every program state σ

For all pairs of threads t_1 and t_2 in σ :

if t_1 and t_2 are **enabled**

temporal check

if $\text{Loc}(t_1, \sigma) = \text{Loc}(t_2, \sigma)$

spatial check

exit (“Program may be **non-deterministic**”)

exit (“Program is **deterministic**”)

$\text{Loc}(t, \sigma)$ returns the memory location accessed by transition about to be accessed by thread t