Programa γ $\quad f(x,y,w)$

$X = \frac{1}{2}\langle 1\rangle + \frac{1}{2}\langle 0\rangle \to c_2$ $\quad \mathbb{P}(X+Y=0) = \emptyset$

$Y = \frac{1}{2}\langle 1\rangle + \frac{1}{2}\langle 0\rangle \to c_1$ $\quad \mathbb{P}(X+Y=0) = !\emptyset$

```
if ( X+Y=0 )
    w=1
else
    w=0
```

$\} \to c_0$

$$ert[c_0](f) = 1 + \emptyset \cdot ert[w=1](f) + !\emptyset \cdot ert[w=0](f)$$

$$= 1 + \emptyset(f_{??1} + 1) + !\emptyset(1 + f_{??0})$$

$$= 1 + \emptyset f_{??1} + \underline{\emptyset} + !\underline{\emptyset} + !\emptyset f_{??0}$$

$$= 2 + \emptyset f_{??1} + !\emptyset f_{??0} \to f_0$$

$$ert[c_1](f_0) = 1 + \frac{1}{2} f_{0?1} + \frac{1}{2} f_{0?0}$$

$$= 1 + \frac{1}{2}(2 + \emptyset f_{?11} + !\emptyset f_{?10})$$

$$+ \frac{1}{2}(2 + \emptyset f_{?01} + !\emptyset f_{?00})$$

$$= 3 + \frac{1}{2}(\emptyset f_{?11} + !\emptyset f_{?10} + \emptyset f_{?01} + !\emptyset f_{?00})$$

f_1

$$\mathrm{est}_{[G_2]}(f) = 1 + \frac{1}{2} f_1 + \frac{1}{2} f_0$$

$$= 1 + \frac{1}{4}\left(\phi f_{111} + !\phi f_{110} + \phi f_{101} + !\phi f_{100}\right) + \frac{3}{2}$$

$$+ \frac{1}{4}\left(\phi f_{011} + !\phi f_{010} + \phi f_{001} + !\phi f_{000}\right) + \frac{3}{2}$$

$$= 4 + \frac{1}{4}\left(\phi f_{111} + !\phi f_{110} + \phi f_{101} + !\phi f_{100}\right.$$
$$\left. + \phi f_{011} + !\phi f_{010} + \phi f_{001} + !\phi f_{000}\right)$$

Programa f_1

$f(x,y)$

$X = \frac{1}{2}\langle 1\rangle + \frac{1}{2}\langle 0\rangle \to C_2$

$Y = \frac{1}{2}\langle 1\rangle + \frac{1}{2}\langle 0\rangle \to C_2$

$P(X+Y=0) = \phi$

$P(X+Y\neq 0) = !\phi$

if $(X+Y=0)$

$\not{\#} = 1$ $\Big\rangle C_0$

else

$\not{\#} = 0$

$ert[C_0](f) = 1 + \phi \cdot ert[X=1](f) + !\phi\, ert[\not{\#}=0](f)$

$= 1 + \phi(f_{1?} + 1) + !\phi(1 + f_{0?})$

$= 1 + \phi f_{1?} + \phi + !\phi + !\phi f_{0?}$

$= 2 + \phi f_{1?} + !\phi f_{0?} \to f_0$

$ert[C_1](f_0) = 1 + \frac{1}{2} f_{0_1} + \frac{1}{2} f_{0_0}$

$= 1 + \frac{1}{2}(2 + \phi f_{11} + !\phi f_{01})$

$+ \frac{1}{2}(2 + \phi f_{10} + !\phi f_{00})$

$= 3 + \frac{1}{2}(\phi f_{11} + !\phi f_{01} + \phi f_{10} + !\phi f_{00})$

$\downarrow$

f

f_1

Se puede reevaluar en X?

$\text{ent}[c_2](f_1) = \frac{1}{1} + \frac{1}{2} f_1 + \frac{1}{2} f_1$