

## **effect\_p-discrete**<sup>11,40</sup>

$\forall es:ES, i, x:Id, ds:x:Id \text{ fp} \rightarrow \text{Type}, k:Knd, T:\text{Type}, f:(\text{State}(ds) \rightarrow T \rightarrow \text{DeclaredType}(ds;x)).$   
( $\uparrow \text{discrete}(i;x)$ )  
 $\Rightarrow @i$  events of kind  $k$  change continuous  $x$  to  $\lambda s,v,t. f(s,v) \text{ State}(ds) (\text{val}:T)$   
 $\Rightarrow @i$  events of kind  $k$  change  $x$  to  $f \text{ State}(ds) (\text{val}:T)$