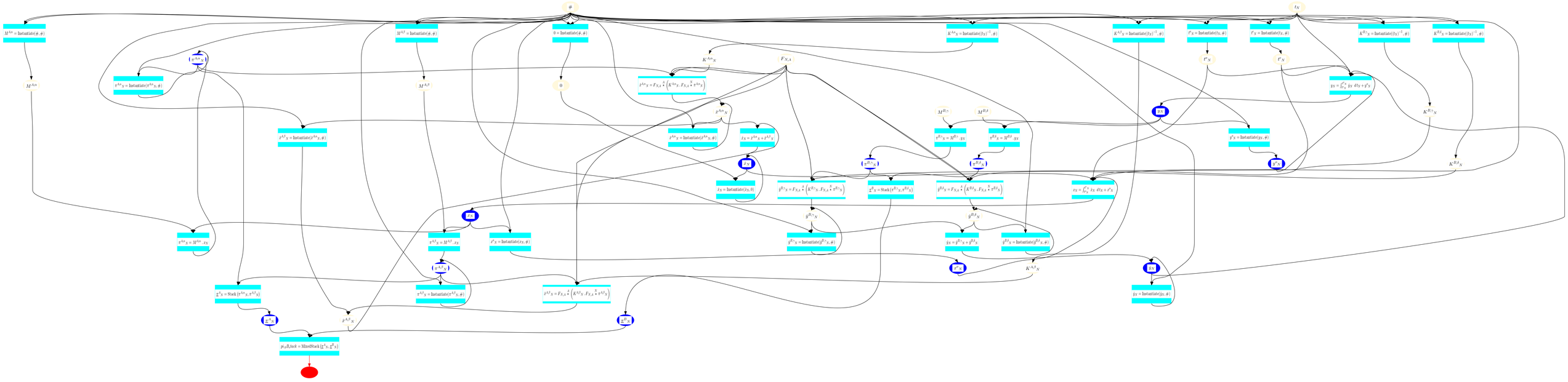
#
t_N
$M^{A\phi} = \text{Instantiate}(\vec{\phi}, \vec{\phi})$
$M^{A\beta} = \text{Instantiate}(\vec{\phi}, \vec{\phi})$
$0 = \text{Instantiate}(\vec{\phi}, \vec{\phi})$
$K^{A\phi}{}_X = \text{Instantiate}((t_X)^{-1}, \vec{\phi})$
$K^{A\beta}{}_X = \text{Instantiate}((t_X)^{-1}, \vec{\phi})$
$t'_X = \text{Instantiate}(t_X, \vec{\phi})$
$t'_X = \text{Instantiate}(t_X, \vec{\phi})$
$K^{B\beta}{}_X = \text{Instantiate}((t_X)^{-1}, \vec{\phi})$
$K^{B\beta}{}_X = \text{Instantiate}((t_X)^{-1}, \vec{\phi})$
$\pi^{A\phi}{}_N$
$K^{A\phi}{}_N$
$F_{N,A}$
t'_N
t'_N
$M^{A\phi}$
$\pi^{A\phi}{}_X = \text{Instantiate}(\pi^{A\phi}{}_X, \vec{\phi})$
$M^{A\beta}$
0
$\dot{\pi}^{A\phi} = F_{N,A} \star \left(K^{A\phi}{}_X . F_{N,A} \overset{N}{\star} \pi^{A\phi}{}_X\right)$
$y_X = \int_{t'_X}^{t_X} \dot{y}_X \, dt_X + y^0{}_X$
$\dot{\pi}^{A\phi}{}_N$
$\dot{\pi}^{A\phi}{}_X = \text{Instantiate}(\dot{\pi}^{A\phi}{}_X, \vec{\phi})$
$\dot{\pi}^{A\phi}{}_X = \text{Instantiate}(\dot{\pi}^{A\phi}{}_X, \vec{\phi})$
$\dot{\pi}^{A\beta}{}_X = \text{Instantiate}(\dot{\pi}^{A\beta}{}_X, \vec{\phi})$
$\dot{\pi}^{A\phi}{}_X = \dot{\pi}^{A\phi}{}_X + \dot{\pi}^{A\beta}{}_X$
$\dot{\pi}^{A\phi}{}_X$
$M^{B\gamma}$
$M^{B\beta}$
$\dot{y}'_X = \text{Instantiate}(y_X, \vec{\phi})$
$\dot{\pi}^{B\gamma}{}_X = M^{B\gamma} \cdot y_X$
$\dot{\pi}^{B\beta}{}_X = M^{B\beta} \cdot y_X$
$\dot{\pi}^{B\gamma}{}_N$
$\dot{\pi}^{B\beta}{}_X$
$\dot{y}'_X$
$K^{B\gamma}{}_N$
$K^{B\beta}{}_N$
$\dot{\pi}^{A\phi}{}_X = M^{A\phi} \cdot x_X$
$\dot{\pi}^{A\beta}{}_X = M^{A\beta} \cdot x_X$
$x'_X = \text{Instantiate}(x_X, \vec{\phi})$
$\dot{x}^{A\phi}{}_N$
$\dot{x}^{A\phi}{}_X = \text{Instantiate}(\dot{x}^{A\phi}{}_X, \vec{\phi})$
$\dot{x}^{A\phi}{}_X = \text{Instantiate}(\dot{x}^{A\phi}{}_X, \vec{\phi})$
$\dot{x}_X = \dot{x}^{A\phi}{}_X + \dot{x}^{A\beta}{}_X$
$\dot{x}_X$
$x_X = \text{Instantiate}(x_X, 0)$
$\dot{y}^{B\gamma}{}_X = F_{N,A} \star \left(K^{B\gamma}{}_X . F_{N,A} \overset{N}{\star} \dot{\pi}^{B\gamma}{}_X\right)$
$\dot{\pi}^{B}{}_X = \text{Stack}(\dot{\pi}^{B\gamma}{}_X, \dot{\pi}^{B\beta}{}_X)$
$\dot{y}^{B\beta}{}_X = F_{N,A} \star \left(K^{B\beta}{}_X . F_{N,A} \overset{N}{\star} \dot{\pi}^{B\beta}{}_X\right)$
$x_X = \int_{x'_X}^{x_X} \dot{x}_X \, dt_X + x'_X$
$\dot{x}_X$
$\dot{y}^{B\gamma}{}_N$
$\dot{y}^{B\beta}{}_N$
$\dot{y}^{B\gamma}{}_X = \text{Instantiate}(\dot{y}^{B\gamma}{}_X, \vec{\phi})$
$\dot{y}_X = \dot{y}^{B\gamma}{}_X + \dot{y}^{B\beta}{}_X$
$\dot{y}^{B\beta}{}_X = \text{Instantiate}(\dot{y}^{B\beta}{}_X, \vec{\phi})$
$\dot{y}_X$
$K^{A\beta}{}_N$
$\dot{y}_X$
$\dot{\pi}^{A\beta}{}_X$
$\dot{\pi}^{A\beta}{}_X = \text{Instantiate}(\dot{\pi}^{A\beta}{}_X, \vec{\phi})$
$\dot{\pi}^{A\beta}{}_X = F_{N,A} \star \left(K^{A\beta}{}_X . F_{N,A} \overset{N}{\star} \dot{\pi}^{A\beta}{}_X\right)$
$\dot{y} = \text{Instantiate}(\dot{y}_X, \vec{\phi})$
$\dot{\pi}^{A}{}_X = \text{Stack}(\dot{\pi}^{A\phi}{}_X, \dot{\pi}^{A\beta}{}_X)$
$\dot{\pi}^{A}{}_N$
$\dot{x}^{A\beta}{}_N$
$\dot{\pi}^{B}{}_N$
$p_{4,B,lock} = \text{MixedStack}(\dot{\pi}^{A}{}_X, \dot{\pi}^{B}{}_X)$