

$\textcircled{1} \quad (\text{fun } (f \ x \ y) \ e)$     $\textcircled{2} \quad (\text{fun } (f \ (x : T_x)(y : T_y)) \ e)$   
 $[x : A][y : A]e : T$        $(\text{fun } (f \ (x : \text{Bool})(y : \text{Num}))$   
 Billions of       $(f \ 3 \ 4)$   
 LOC un-annotated      can only compile with  
 These don't TC      all tc turned off

$f_{\text{-notc}}$   
 full un-ann func

$f :$  check + don't compile  
 mov r12, f.d.fas-d  
 ... more args ...  
 call compile-me  
 jmp rax

fn compile-me (f.a : int, x : 16^4, y : 16^4)  
 let (def.b1) = get-fun(f.ad)  
 let env = calc-env(def, x, y)  
 let tdf = tc-def(def, env)  
 let fastf = compile-def(def)  
 int64-to-asm(GLOBAL\_OPS, fastf)  
 return ... label fast ...