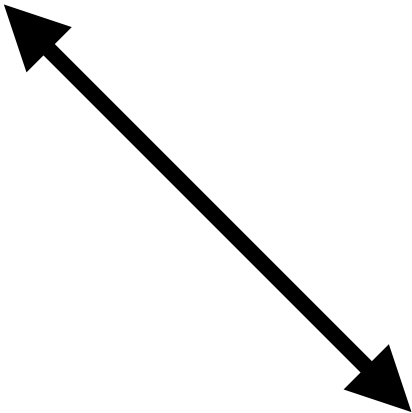




$$\Gamma \vdash_{\Sigma, \Omega} t :: \textcolor{violet}{d} \ A$$

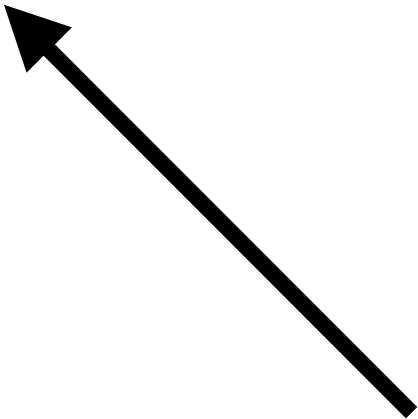
$$\Gamma \vdash \Sigma, \Omega \quad t :: A$$



**Soundness &**

**Completeness**

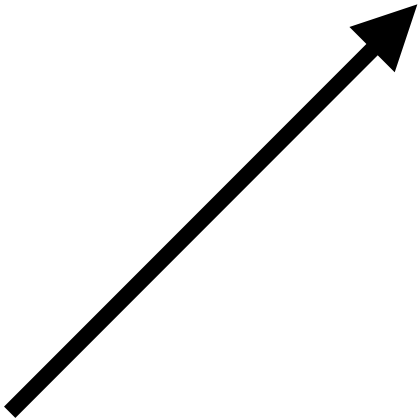
$$\| \Gamma \|_{\Sigma, \Omega} t^d$$



**Mode Decoration**



$|$   $\Gamma$   $|$   $\vdash$   $\Sigma, \Omega$   $t$



**Bidirectional Type  
Synthesis**



**SOUNDNESS**

**Completeness**







**Mode**

**Declaration**





**V**









**V**



















































































































