Interpreting HOL in ST

- HOL term t associated with $[\![t]\!]$ of type V

$$
\begin{array}{lcl}
[\![x : \sigma]\!] & = & x : V \\
[\![\mathsf{c} : \sigma[\sigma_1, \ldots, \sigma_n]\,]\!] & = & |\mathsf{c}|\ [\![\sigma_1]\!]\ \cdots\ [\![\sigma_n]\!] \\
[\![\lambda\, x : \sigma.\ t]\!] & = & \texttt{Fn}\ x\ \in\ [\![\sigma]\!].\ [\![t]\!] \\
[\![t_1\ \ t_2]\!] & = & [\![t_1]\!] \diamond [\![t_2]\!]
\end{array}
$$