msc sk_p sk_{τ} Holder (Student) Eve (as Verifier | as Holder) Verifier (University) new n_V , sk_V^S , n_c , tkn_{access} new $n_{PE(V)}$, $sk_{PE(V)}^{S}$ $\{\{(n_{PE(V)}, pk(sk_{PE(V)}^S))\}_{sk_{PE(V)}^S}\}_{pk(sk_{E(V)})}$ $\{\{(n_{PE(V)}, n_{E(V)}, pk(sk_{E(V)}^S))\}_{sk_{E(V)}}\}_{pk(sk_{PE(V)}^S)}$ $\{\{(n_{E(P)}, pk(sk_{E(P)}^S))\}_{sk_{E(P)}^S}\}_{pk(sk_V)}$ $\{\{(n_{E(P)}, n_V, pk(sk_V^S))\}_{sk_V}\}_{pk(sk_{E(P)}^S)}$ $\{\{(\mathbf{n}_{E(V)}, u)\}_{sk_{PE(V)}^{S}}\}_{pk(sk_{E(V)}^{S})}$ $\{\{(n_V, {\color{red} {u^\prime}})\}_{sk_{_{F(P)}}^S}\}_{pk(sk_V^S)}$ $\{\{(n_c,r)\}_{sk_v^S}\}_{pk(sk_{F(P)}^S)}$ $\{\{(n_c, r)\}_{sk_{P(V)}^S}\}_{pk(sk_{PE(V)}^S)}$ $VP = \{(n_c, VC_{IP})\}_{sk_P}$ $\{\{VP\}_{sk_{PE(V)}^S}\}_{pk(sk_{E(V)}^S)}$ $\{\{\mathit{VP}\}_{\mathit{sk}_{\mathit{F}(\mathit{P})}^{\mathit{S}}}\}_{\mathit{pk}(\mathit{sk}_{\mathit{V}}^{\mathit{S}})}$ $\{\{tkn_{access}\}_{sk_{V}^{S}}\}_{pk(sk_{E(P)}^{S})}$ $\{\{tkn_{access}\}_{sk_{P(V)}^S}\}_{pk(sk_{PE(V)}^S)}$ secret tkn_{access} ni-agreement Holder