

Judge J	Adversary B	virtual A
<p> ► $B.\tilde{m}$ $(sk, pk) := \text{gen}(1^k)$ $\tilde{\sigma} := \text{sgn}(sk, B.m_i)$ </p> <p> ► $B.m, B.\sigma$ return $\text{vrf}(pk, B.m, B.\sigma)$ $\wedge (B.m \neq B.\tilde{m})$ </p>	<p> ► m_1, \dots, m_ℓ for $i = 0 \dots \ell$: $(sk_i, pk_i) := \text{gen}(1^k)$ sample $t \in [\ell]$ $\tilde{m} := m_t \ pk_t$ ► $J.pk, J.\tilde{\sigma}$ $pk_{t-1} := pk$ for $i = 1 \dots \ell$: <div style="border-left: 1px solid black; padding-left: 10px; margin-left: 10px;"> if $i = t$ then $\eta_i := J.\tilde{\sigma}$ else $\eta_i := \text{sgn}(sk_{i-1}, m_i \ pk_i)$ $\sigma_i := (m_j \ pk_j \ \eta_j)_{1 \leq j \leq i}$ </div> ► (m', σ') unpack $\sigma' =: (m'_j \ pk'_j \ \eta'_j)_{1 \leq j \leq i'}$ $m := m'_t \ pk'_t$ $\sigma := \eta'_t$ </p>	<p> select m_1, \dots, m_ℓ </p> <p> ► $pk_0, \sigma_1, \dots, \sigma_\ell$ forge (m', σ') </p>