

**Judge  $J$**  $(sk, pk) := \text{gen}(1^k)$ **for**  $i = 1, 2, \dots:$  $\blacktriangleright A.m_i$  $\sigma_i := \text{sgn}(sk, A.m_i)$  $\blacktriangleright A.m, A.\sigma$ **return**  $\text{vrf}(pk, A.m, A.\sigma)$  $\wedge (\forall i, A.m \neq A.m_i)$ **Adversary  $A$**  $\blacktriangleright J.pk$ **for**  $i = 1, 2, \dots:$ select  $m_i$  $\blacktriangleright J.\sigma_i$ 

compute; break if appropriate

forge  $(m, \sigma)$