

**Judge  $J$** 

$(sk, pk) := \text{gen}(1^k)$

**for**  $i = 1, 2, \dots :$

    ▶  $A.m_i$

$\sigma_i := \text{sgn}(sk, A.m_i)$

▶  $A.m, A.\sigma$

**return**  $\text{vrf}(pk, A.m, A.\sigma)$

$\wedge (\forall i \in [l], A.m \neq A.m_i)$

**Adversary  $A$** 

▶  $J.pk$

**for**  $i = 1, 2, \dots :$

    select  $m_i$

    ▶  $J.\sigma_i$

    compute; break if appropriate  
forge  $(m, \sigma)$