• We say that a block, $b = ((h_{-1}; h'; \eta; digest; m; h), F)$, is valid iff digest = d(F), F is a valid fruit-set, $H(h_{-1}; h'; \eta, \mathsf{d}(F); \mathsf{m}) = h$ and $[h]_{:\kappa} < D_{p_1}$ where $[h]_{:\kappa}$ denotes the first κ bits of h; we call h the reference of b.