

## NuCypher PRE Properties

- Unidirectional
- Single hop
- Non-interactive

## KEM/DEM Approach

- Umbral KEM for threshold re-encryption
- ECIES for key encapsulation
- DEM can be any AE (ChaCha2O-Poly13O5)

## Verification of Correctness

- Verification through non-interactive ZK-proof
- Incentive layer via NU staking token
- Re-encryption validated by challenge protocol