

ZKP & IP

Zero-Knowledge Proof
Interactive Proof
[GMR85][Bab85]

GKR

Sumcheck-based
proof system
[GKR08]

Libra

GKR-based
Zero-knowledge Proof
[XZZPS19]

ZKP for NP

Zero-Knowledge Proof for
General NP languages
[GMW86]

NIZK

Non-Interactive Zero-Knowledge
[BFM88][DMP90][FLS90]

Pairing

Bilinear Pairing
based-on Elliptic curves
[BF01]

Pairing-based zkSNARK

Pairing-based Zero-Knowledge Non-Interactive
Argument of Knowledge
[GOS06][Gro06][Gro09][Gro10]

QAP-based zkSNARK

Quadratic Arithmetic Program-based
SNARK
[GGPR13][PHGR13][Lip13]
[Gro16][BCI+13]

(ZK)PCP

Probabilistic Checkable Proof
[BFLS91][ALMSS98]

Succinct (ZK)IA

Succinct Interactive Argument
from PCP + Merkle-Tree
[Kil92]

(ZK)SNARG

Succinct Non-Interactive Argument
from PCP + Merkle-Tree + Fiat-Shamir
[Mic94][Mic00]

(ZK)S(N)TARK

Scalable Transparent Argument of Knowledge
[BBHR18]

MPC-based-ZK

MPC-in-the-head approach
[IKOS]

ZKBoo

ZKB++

Ligero

[AHIV17]

(ZK)IOP

Interactive Oracle Proof
[BCS16]

FRI

Fast Reed-Solomon IOP