SQISign: Light post-quantum signatures from quaternions and isogenies

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ANTS 2020, Rump Session

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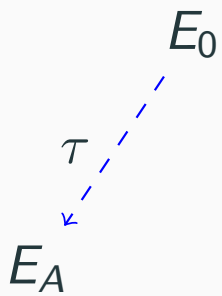

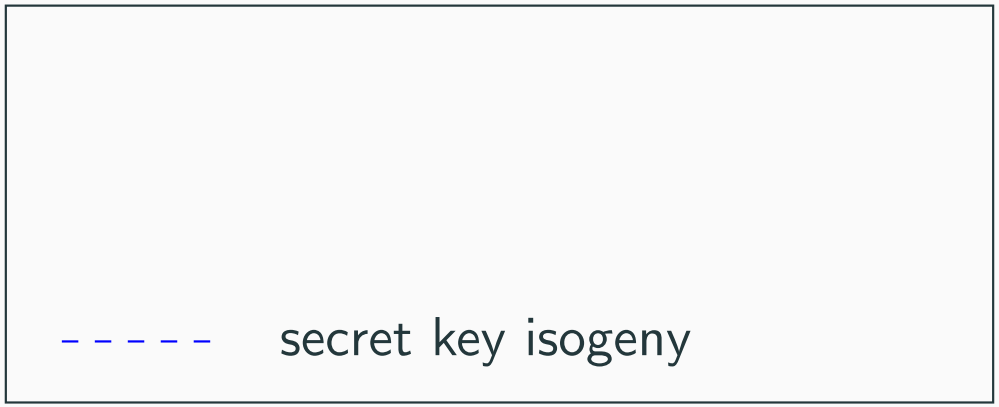

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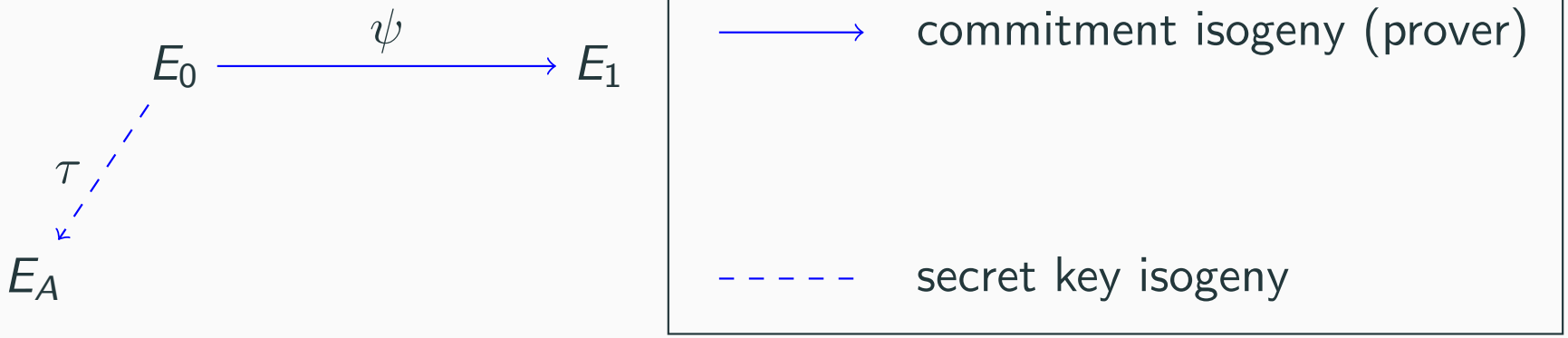

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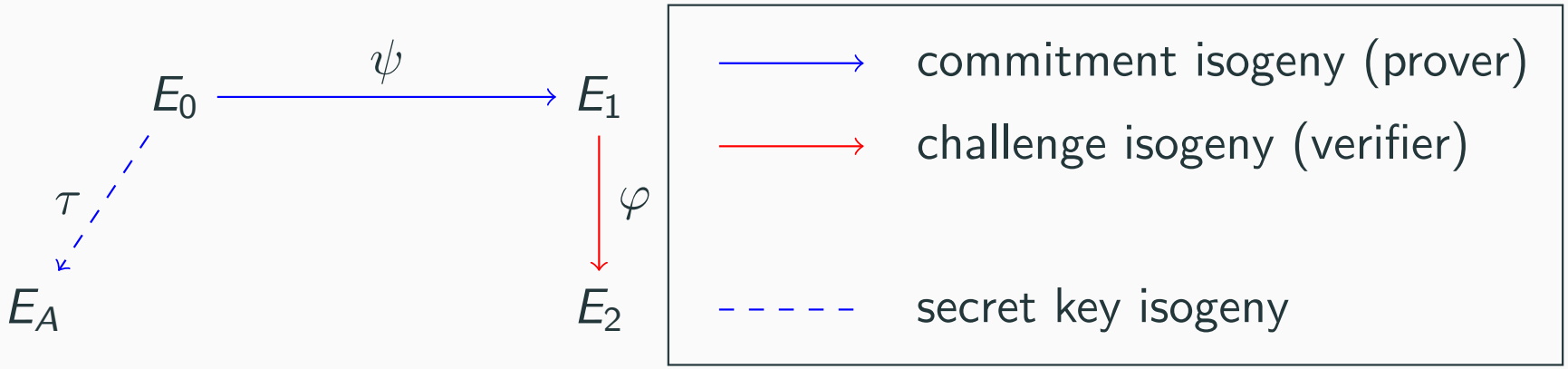

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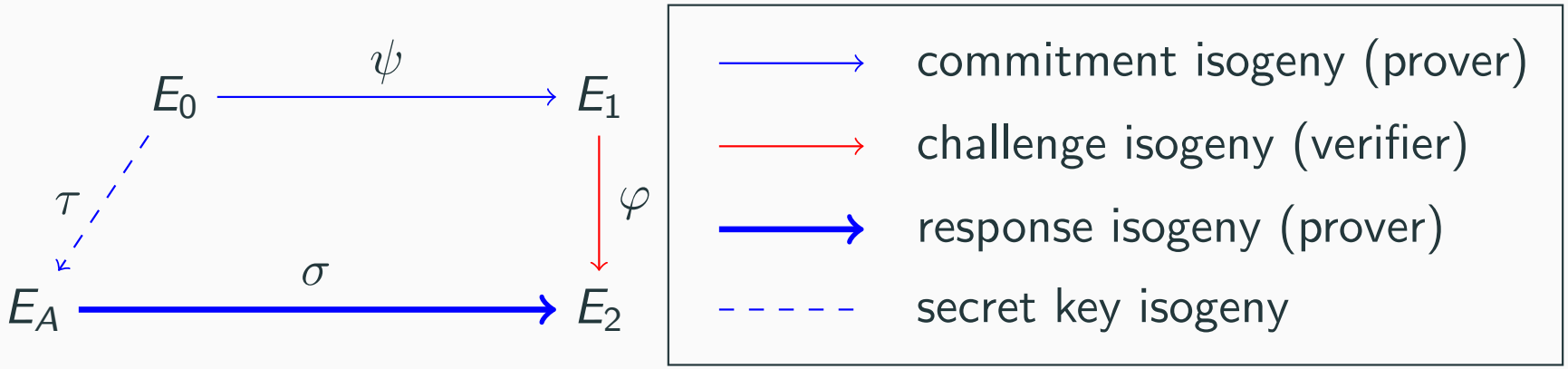

Performances

Secret Key (bytes)	Public Key (bytes)	Signature (bytes)
16	64	204

Table 1: Size of SQISign keys and signature for 128-bit of security and NIST level 1.

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	Keygen	Sign	Verify
Mcycles	1,959	7,767	142
ms	575	2,279	42

Table 2: Performance of SQISign in millions of cycles and in milliseconds, on an Intel core i7 Skylake @ 3.40 GHz CPU

Thanks!