Which public-key systems are smallest? Fastest?

eBATS (ECRYPT Benchmarking of Asymmetric Systems): new project to measure time and space consumed by public-key signature systems, public-key encryption systems, public-key secret-sharing systems.

To join list: `ebats-subscribe@list.cr.yp.to`

Open to public submission of BATs (Benchmarkable Asymmetric Tools).

e.g. submit encrypting BAT with three functions:
`keypair()` to generate keys,
`ciphertext()` to encrypt,
`plaintext()` to decrypt.

BATs are measured by BATMAN (Benchmarking of Asymmetric Tools on Multiple Architectures, Non-Interactively).

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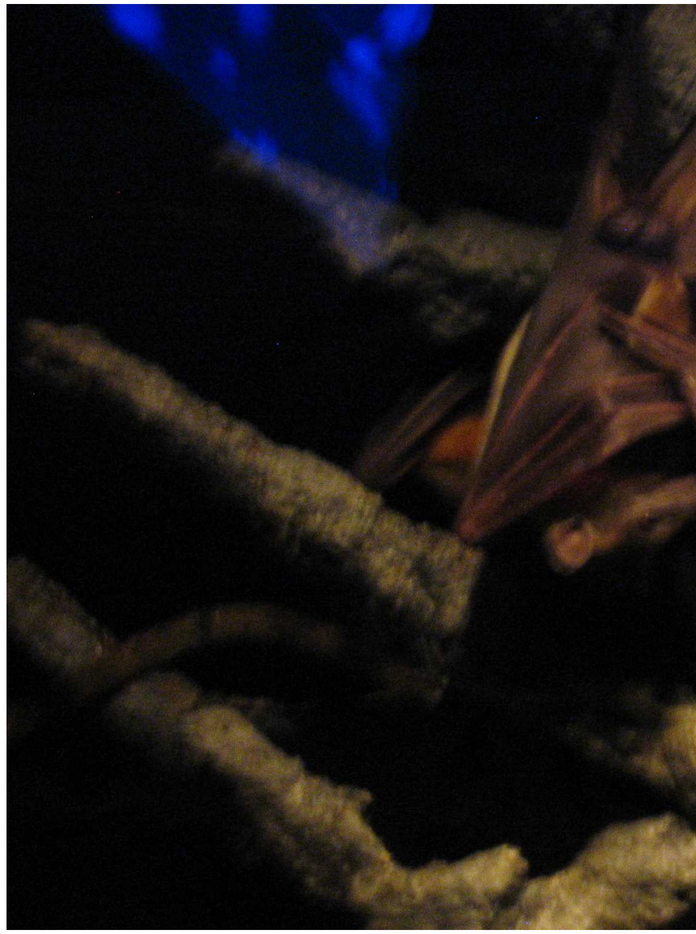

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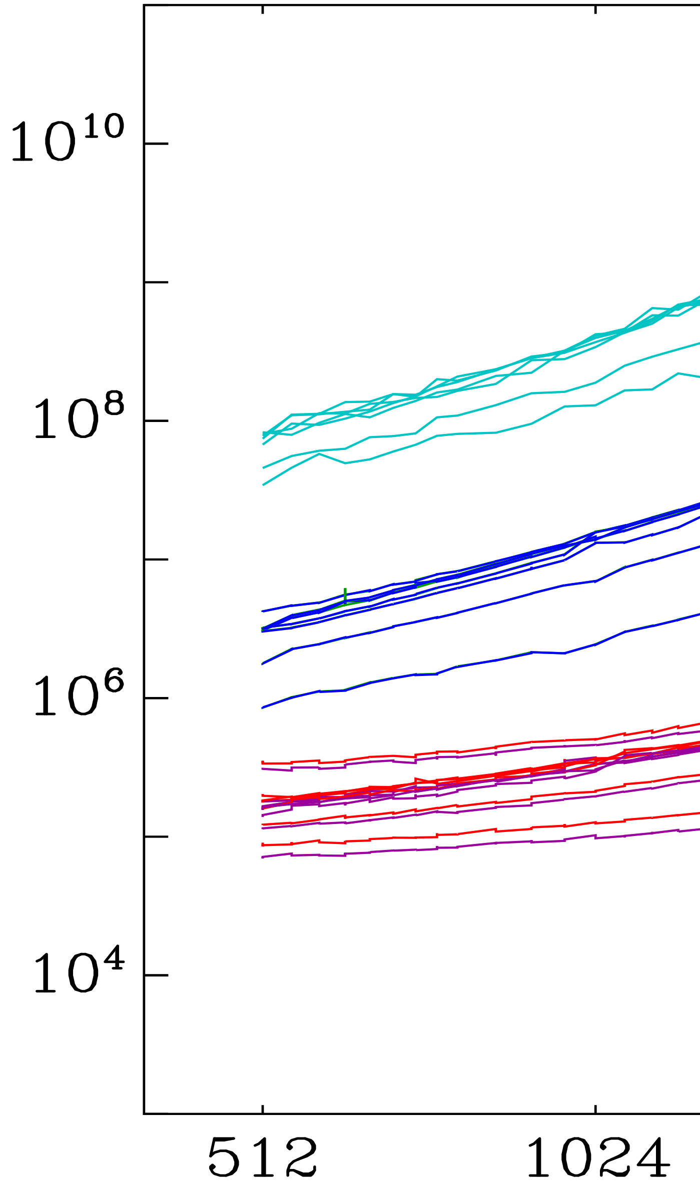

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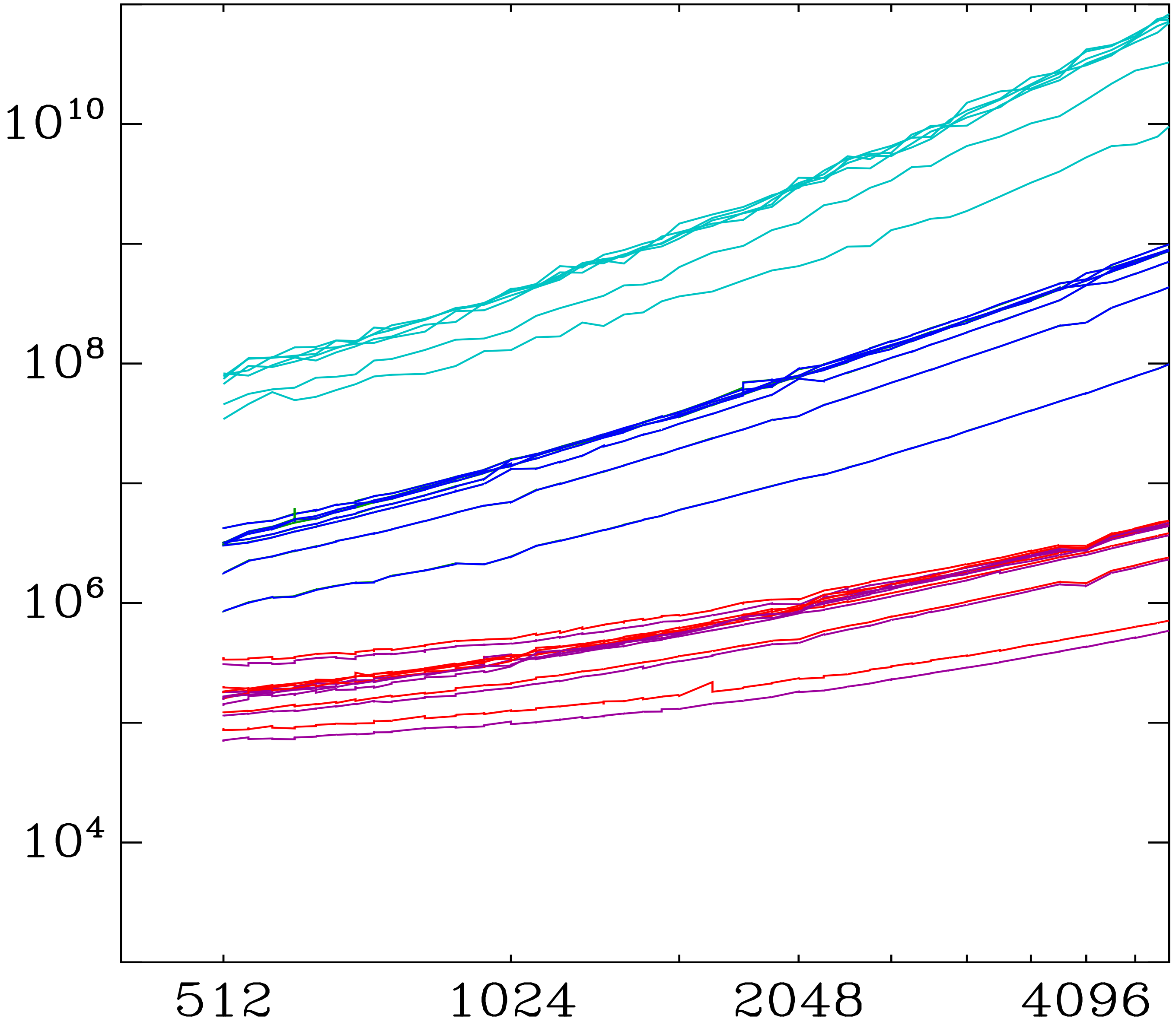

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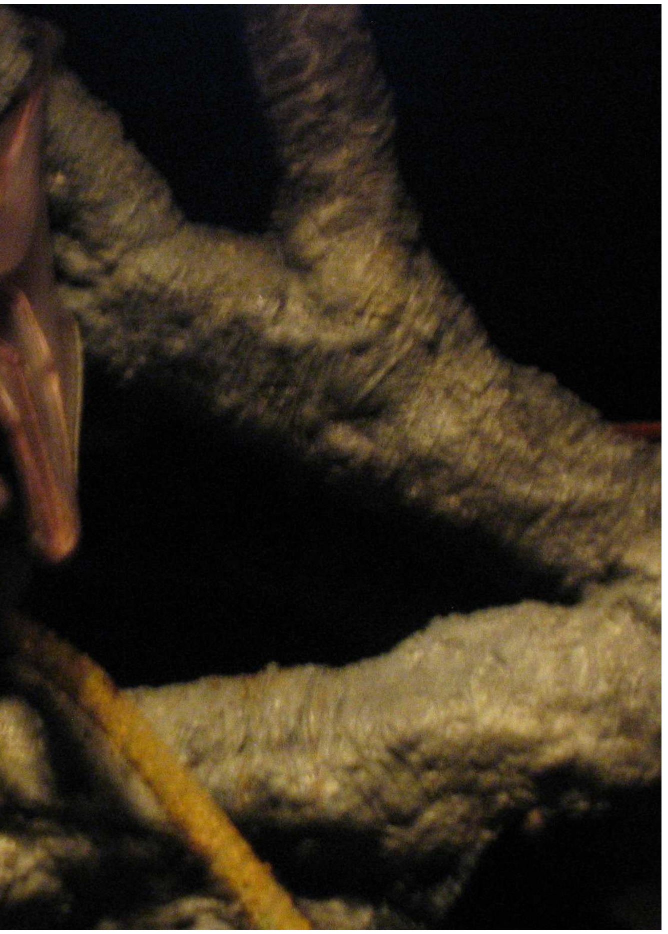

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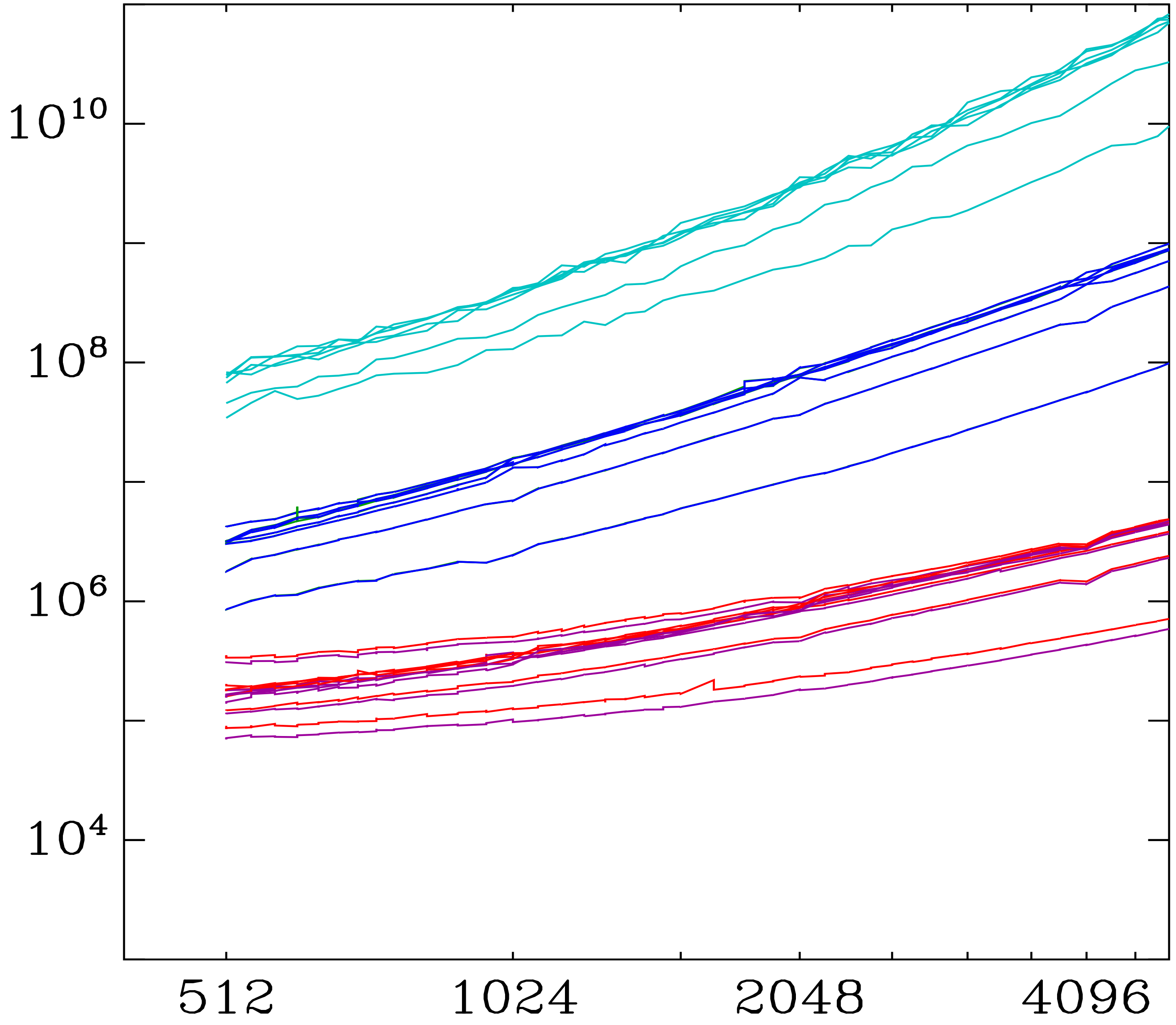

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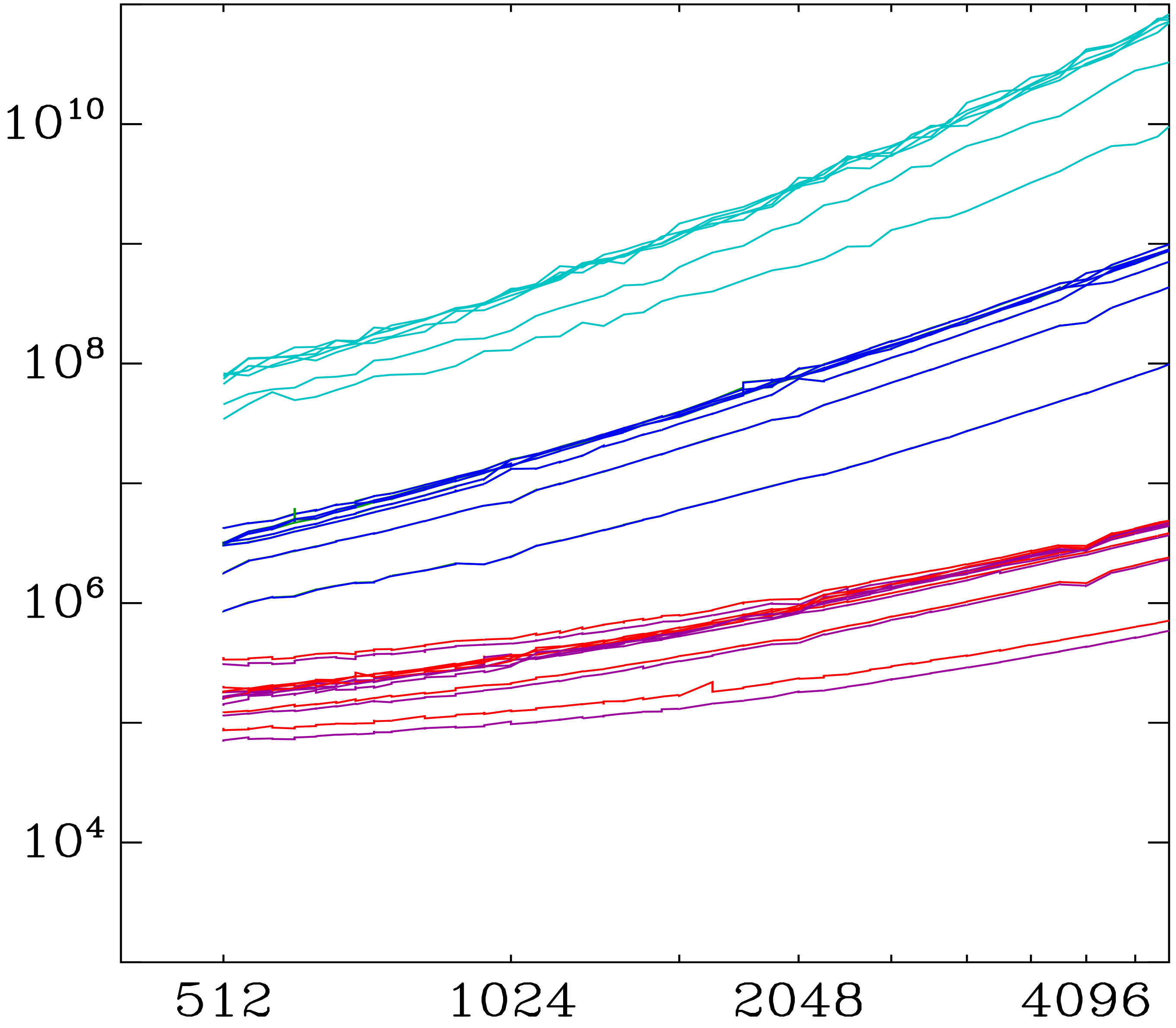

The SHARCS connection: Do users *want* the smallest, fastest systems?

Not exactly! Users want the smallest, fastest systems *at an acceptable security level*.

Open to public evaluation of security levels.

Need papers analyzing costs of attacks against all of these systems.