

FL Science Day 2023







The NIST Crypto Reading Club

Cryptographic Technology Group, Computer Security Division



Live at https://csrc.nist.gov/ projects/crypto-reading-club

Once upon a time ...

... there were many **cryptography** stories to tell







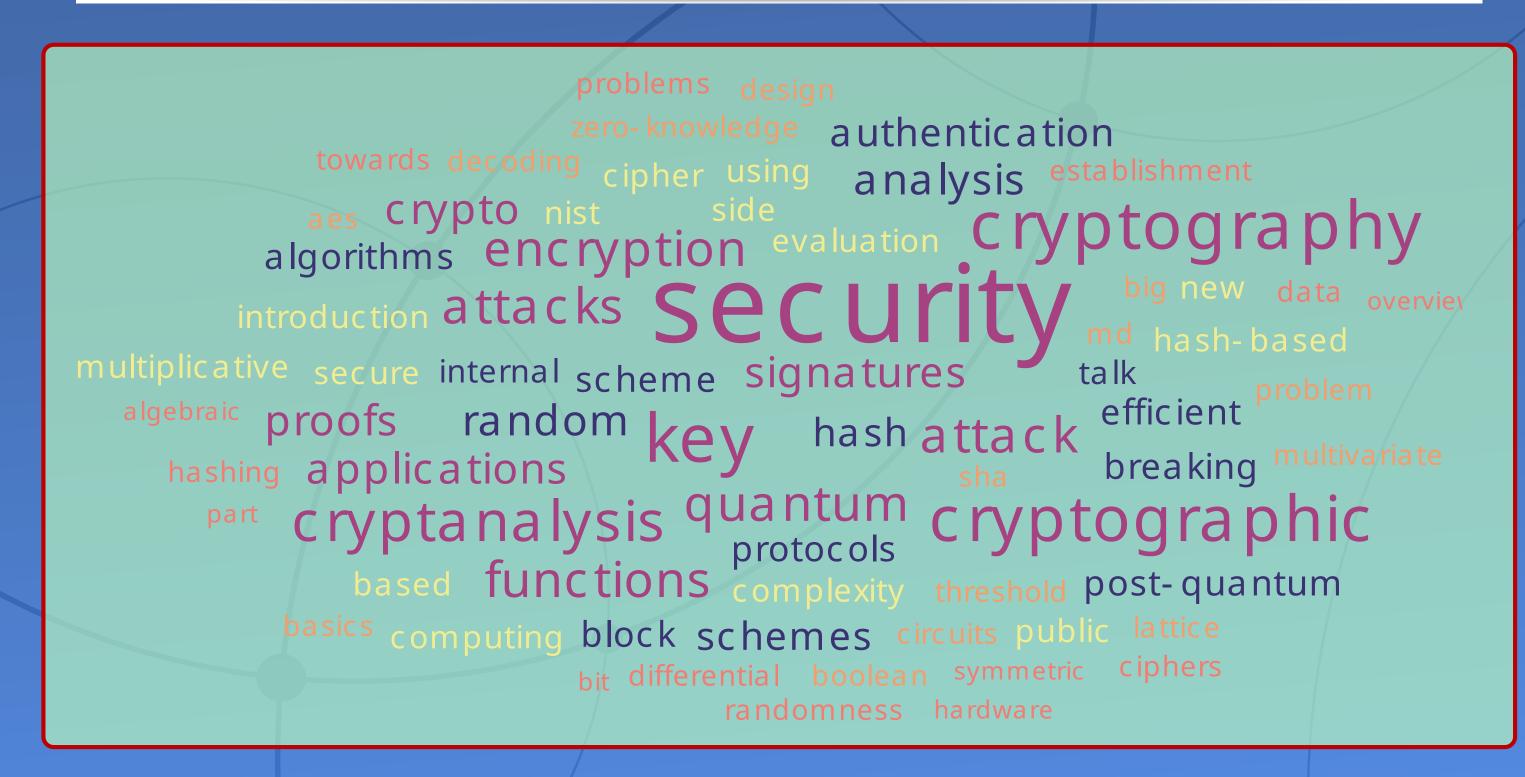




The Crypto Reading Club has hosted 250⁺ talks!

- 8 = : Active since May 2006, for 17.5 years
- # talks per year: 14.5 (avg) $\pm \approx 6$ (stdev) (avg = average; stdev = standard deviation)
- ≈ 150 speakers (NIST-internal and external)
- Virtual/hybrid (recorded) talks since ≈ 2020

More than a word cloud!?



(Word cloud created from the titles of the crypto reading club talks)

The benefits of public reference material

Accessibility, credibility, transparency, educational material, research ideas, training & updates, referenceability, ...

Crypto blocks across time? (an analogy)

- 1. Each "reference material" item is a stone in a wall
- 2. Which crypto blocks will resist the test of time?



The NIST Stone Test Wall (2018 / 1948) 2352 individual samples of stone: 2032 domestic (from 47 states) + 320 from 16 foreign countries

The NIST C.R.Club is also:

- Tradition: A reference activity of the Crypto Group
- Outreach: A point of contact with/for external stakeholders. The mailing-list has ≈ 170 members
- Complementary to other outputs/activities: reports & papers, NIST workshops & external presentations, standards, SDO collaboration & public calls, ...
- Flexible style/content: dissemination (ongoing activities, research) classic techniques and curiosities, rehearsals, gather feedback, introduce ideas, ...

You should join (Why, How, When)

- Come learn about recent and old cryptography topics
- Interact with crypto researchers or/and give a talk
- How: Subscribe to the C.R.Club mailing list for announcements





• When: Meetings are on interleaved Wednesdays (10–11am Eastern Time)



Other Crypto Presentations Sets at NIST

The **CSRC** archives past NIST-hosted crypto presentations. More than 870 talks (T) and 63 panels/discussions (P).

37 Crypto-related Workshops (W)

PQC LWC









2 Seminars



end: $\mathbf{BCM} = \mathbf{B}$ lock-Cipher Modes. $\mathbf{CSRC} = \mathbf{C}$ computer Security Resource Center. $\mathbf{E} = \mathbf{E}$ vents. \mathbf{ECC} otic-Curve Cryptography. STPPA = Special Topics on Privacy and Public Auditability. KeyMgt $\mathbf{C}_{\mathrm{ryptographic-Key}}$ $\mathbf{M}_{\mathrm{anagement.}}$ $\mathbf{LWC} = \mathbf{L}_{\mathrm{ightweight}}$ $\mathbf{C}_{\mathrm{ryptography.}}$ $\mathbf{MPTS} = \mathbf{M}_{\mathrm{ulti-Party}}$ $\mathbf{T}_{\mathrm{hreshold}}$ s. $\mathbf{Pairs} = \mathbf{P}$ airings (a.k.a. bilinear maps). $\mathbf{PEC} = \mathbf{P}$ rivacy- \mathbf{E} nhancing \mathbf{C} ryptography. $\mathbf{PQC} = \mathbf{P}$ ostum Cryptography. $\mathbf{RBG} = \mathbf{R}$ andom-Bit Generation. $\mathbf{SDO} = \mathbf{S}$ tandards Development Organization.

Poster\produced by Luís Brandão[†] for the NIST-ITL Science Day 2023 (November 8th). Foreign Guest Researcher (non-employee) at NIST, contractor from Strativia. es same were provided by the ITL Science Day Team.

















