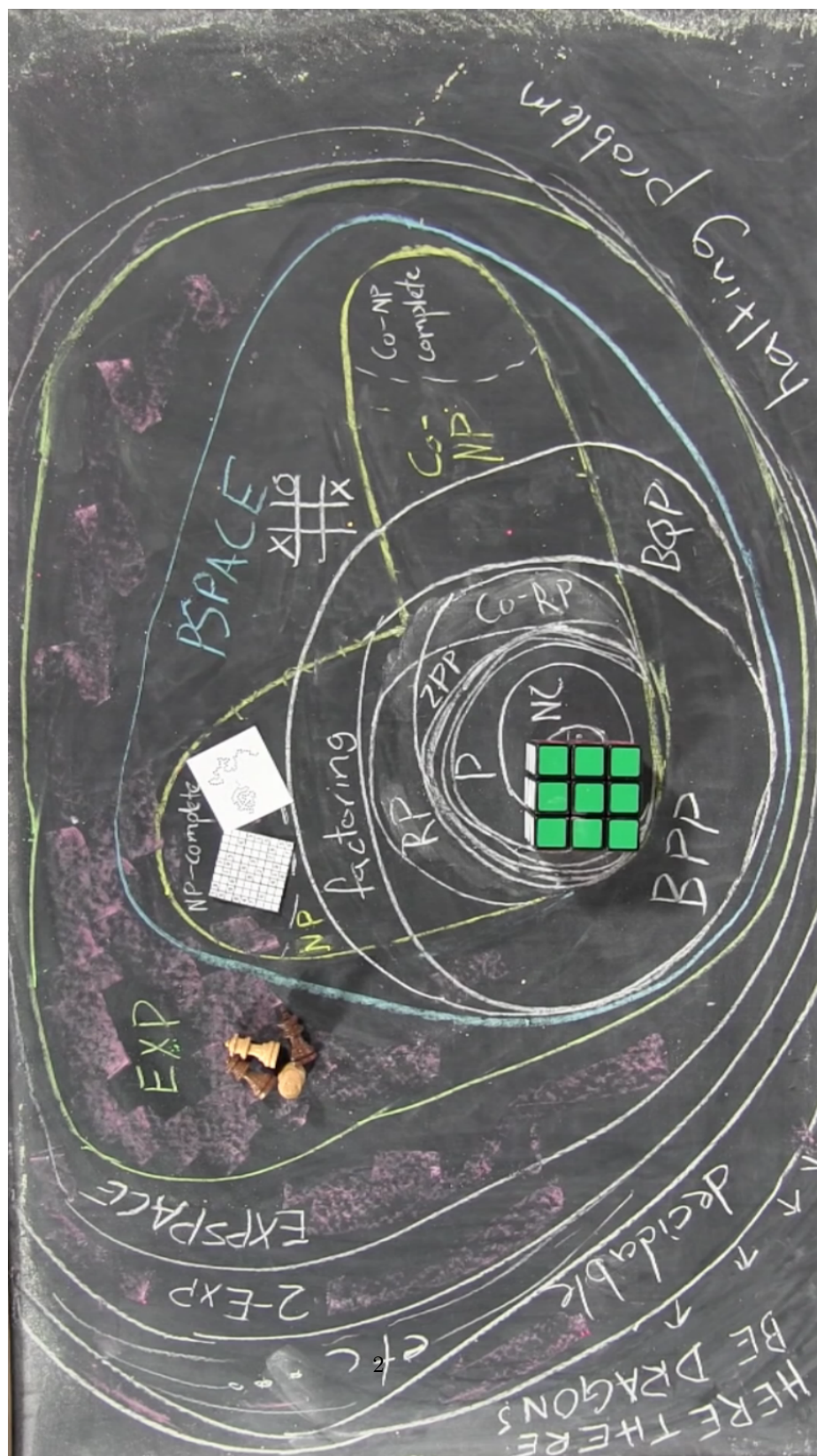


ordering the citations [2] [1] [3]

P = NP versus $P \neq NP$

Time complexity applies to number theory, computer science, and combinatorics. Methods of encryption (*i.e.* RSA, Diffie-Hellman Key Exchange, Elgamal, DSA) rely heavily on the *hope* that $P \neq NP$. Transactions with credit cards and sending other types of sensitive messages use complex encryption methods that use **LARGE** prime numbers. If $P = NP$ then that means that exist methods to figure out and confirm what specific peoples' prime numbers use to encrypt and decrypt those messages quickly; which would imply that our entire economic systems would be built on a house of cards.



References

- [1] Lance Fortnow. The computational complexity column. NEC Laboratories America.
- [2] hackdashery. P vs. np and the computational complexity zoo. YouTube.
- [3] Michael Sipser. The history and status of the p versus np question. Massachusetts Institute of Technology.