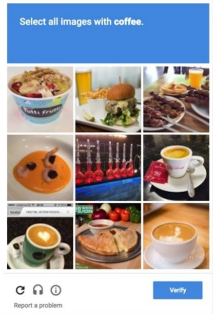
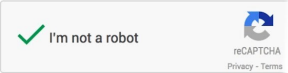


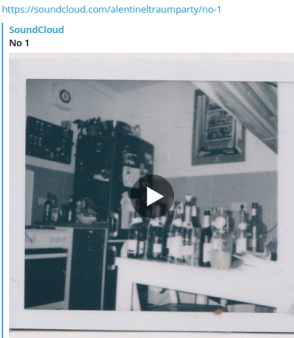
# proof of history - social key recovery



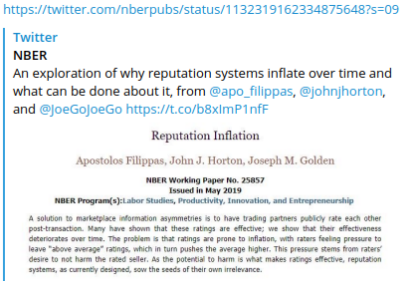
Abstract: Use media content from a chat history as "shared memoy" as a challenge in a challenge-response protocol. Essentially, a user has to prove to several of its peers, that it has knowledge of the content of the (encrypted) conversation and therefore had prior knowledge of the private key. If it success, the user's peers reveal their respective pieces of the key, s.t. the user can recover it.

Note: the media content for the challenges must be filtered to not leak content compromiosing user privacy and must not be guessable by an attacker, e.g. media containing information making the user identiefable should not be used (text and faces must be reomoved, hyperlinks, gifs, videos, music is more suitable). To cope with potential errors, a media set of large enough size has to

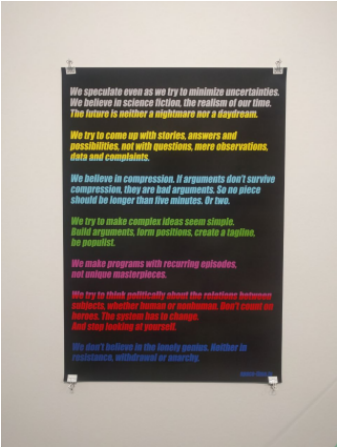
Which of the following content is from my private telegram account?



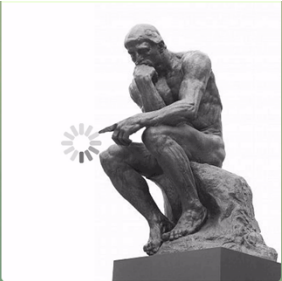
14:52



18:46

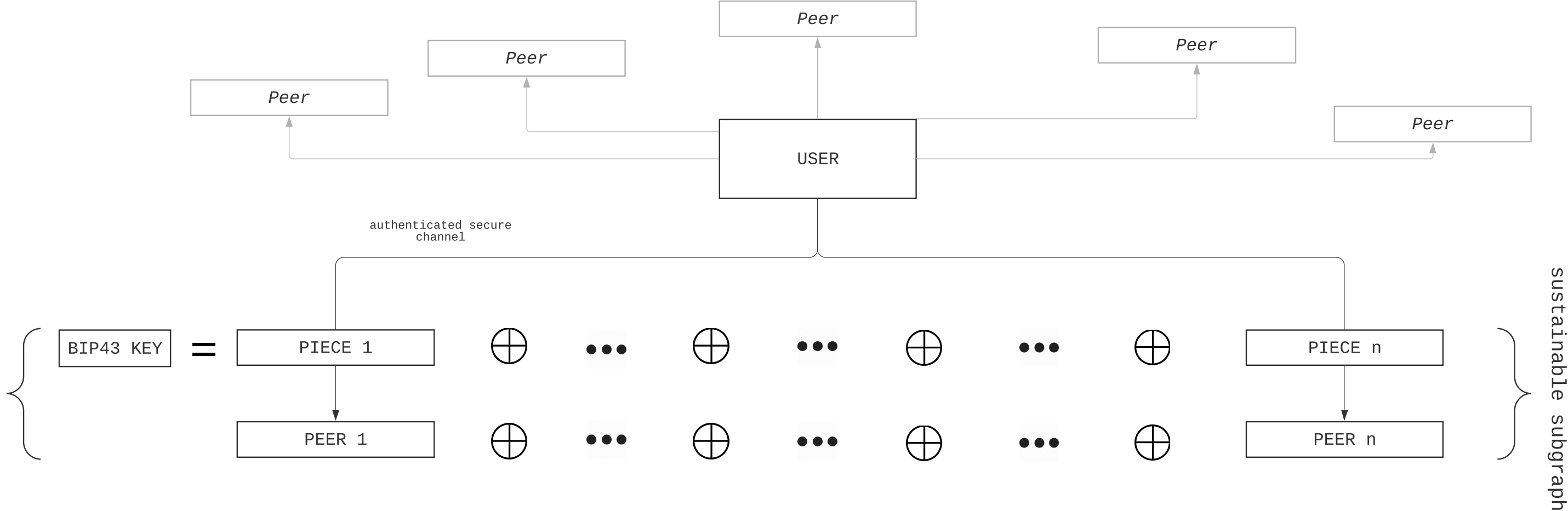


16:43



# proof of history - social key recovery: setup

v0, n=k, manual peer selection



```
Alice want's to recover.  
  She calls Bob and  
    Charlie.
```

## Bob 's challenge

<https://twitter.com/nberpubs/status/1132319162334875648?s=09>

**Twitter**  
**NBER**

An exploration of why reputation systems inflate over time and what can be done about it, from @apoJohnton, @johnjhorton, and @joeGoJoeGo <https://t.co/8bXm1Pnf>

**Reputation Inflation**

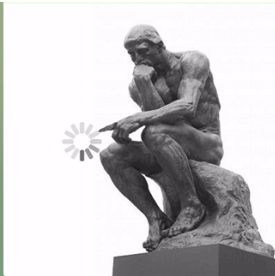
Apostolos Filippas, John J. Horton, Joseph M. Golden

**NBER Working Paper No. 25857**  
**Issued in May 2019**

**NBER Program(s):** Labor Studies, Productivity, Innovation, and Entrepreneurship

A salient to marketplace information asymmetries is to have trading partners publicly rate each post-transaction. Many have shown that these ratings are effective; we show that their effectiveness deteriorates over time. The problem is that ratings are prone to inflation, with ratings feeling pressure to leave "above average" ratings, which in turn pushes the average higher. This pressure stems from rating desire is not harm the rated seller. As the potential to harm is what makes ratings effective, reputation systems, as currently designed, stop the needs of their own usefulness.

18/4



<http://meetup.ps/en/HDJFS/NNkHw/pa>

**Meetup**

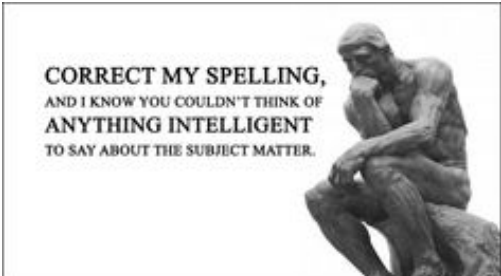
**Open Coworking im Kiez Büro an der Mall of Berlin**

Tue, Mar 3, 2020, 10:00 AM: Open Coworking im Kiez Büro an der Mall of Berlin Laptop mitbringen und bei gutem Kaffee und Tee entspannt arbeiten und andere Leute kennen lernen. Wir fr...

**Open Coworking  
im Kiez Büro  
an der Mall of Berlin**



16:43




## Charlie's challenge

<https://soundcloud.com/alentineltraumparty/no-1>

SoundCloud

No 1



14:50

