



Everyone knows
your birthday

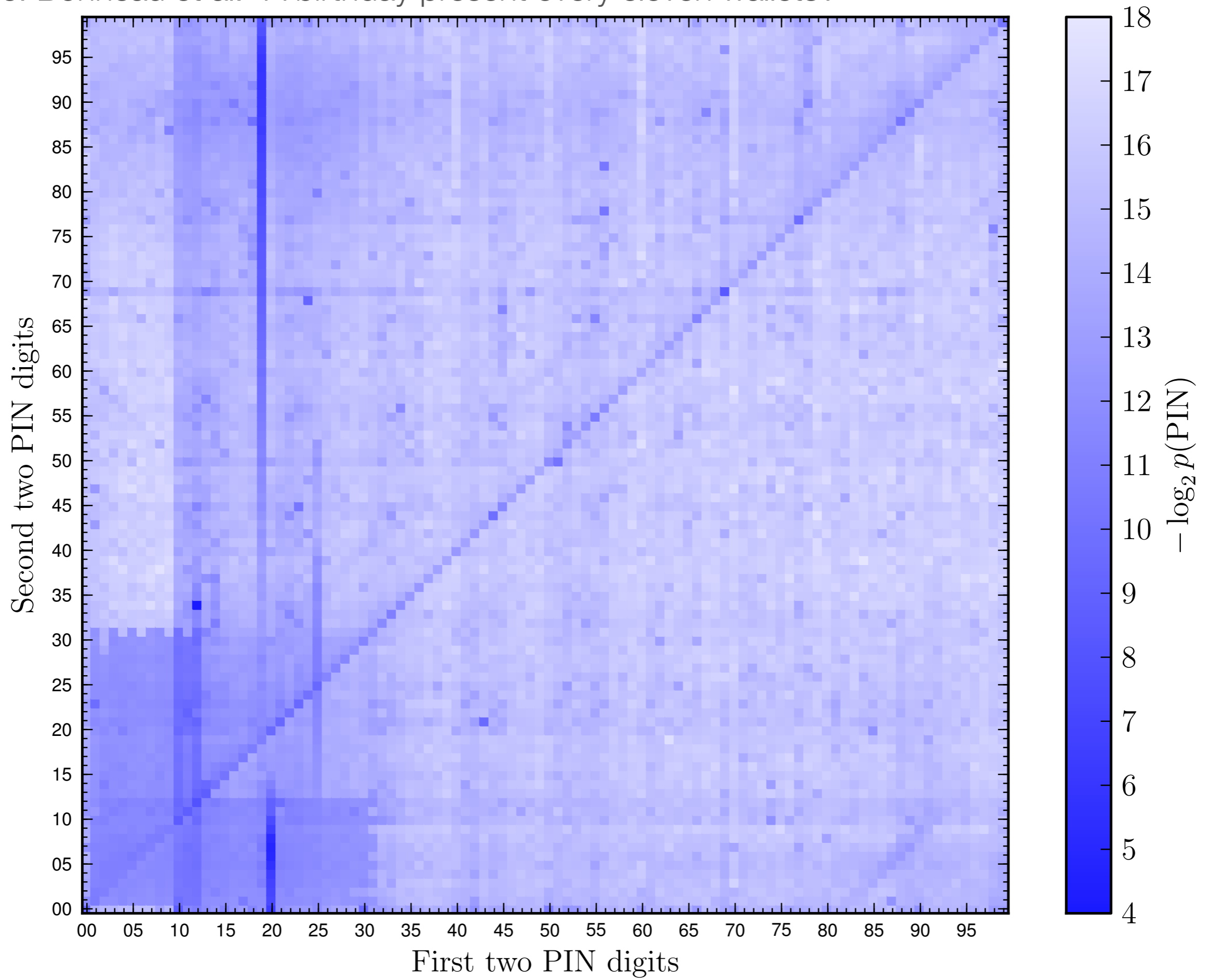
How secure is your password?
Hint: not very

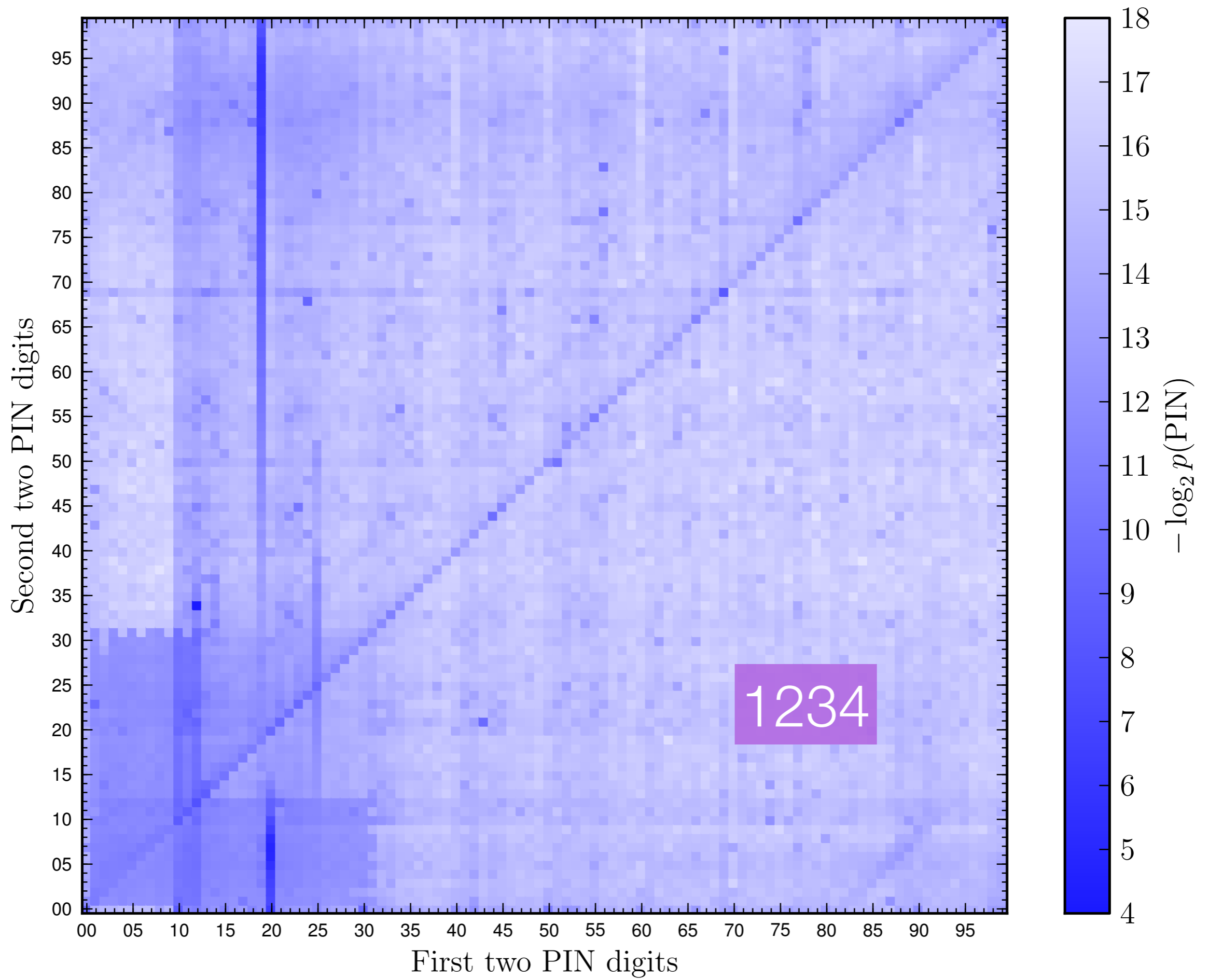
Jeremy Clark, Concordia University

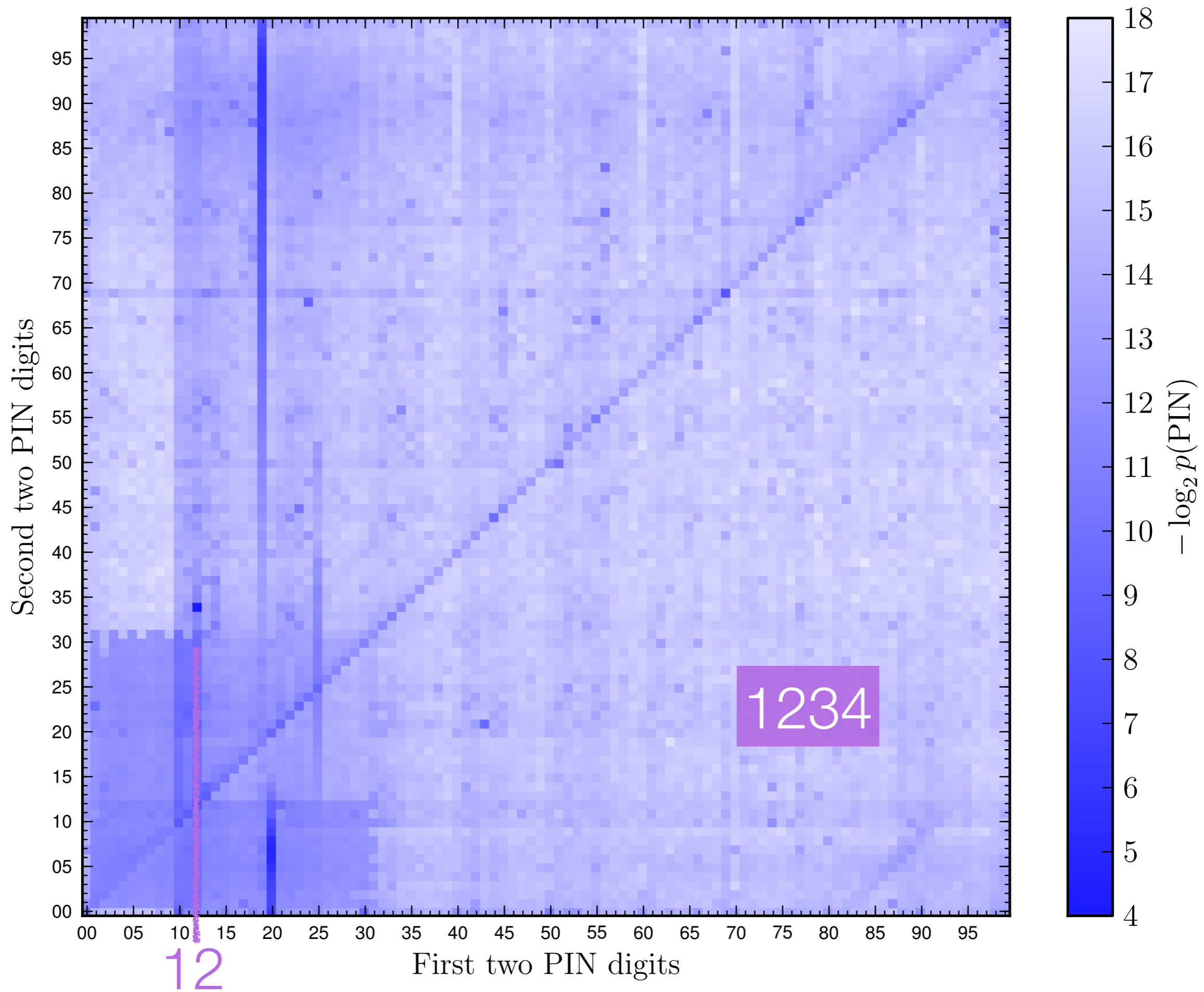
Act I

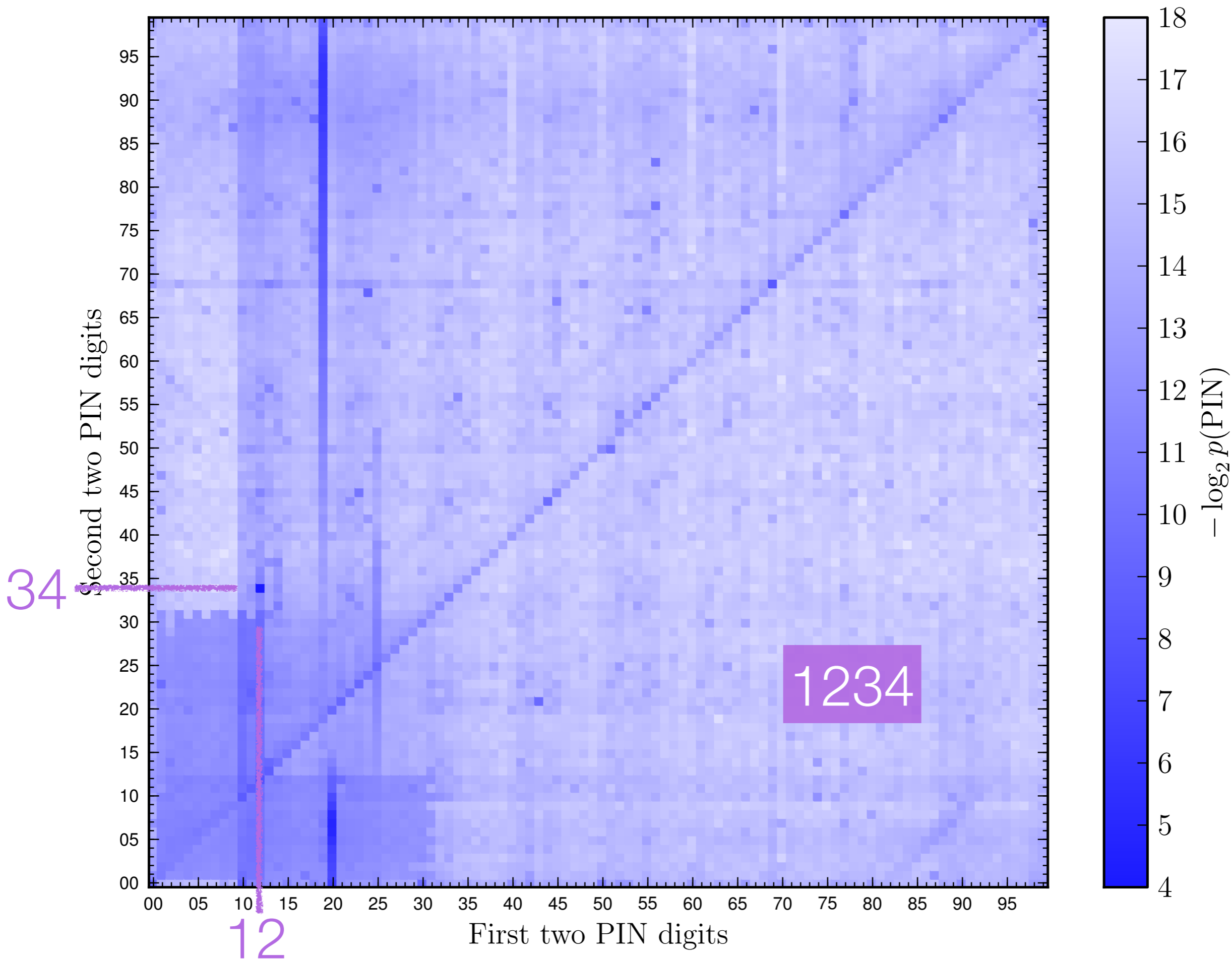
What do passwords look like?

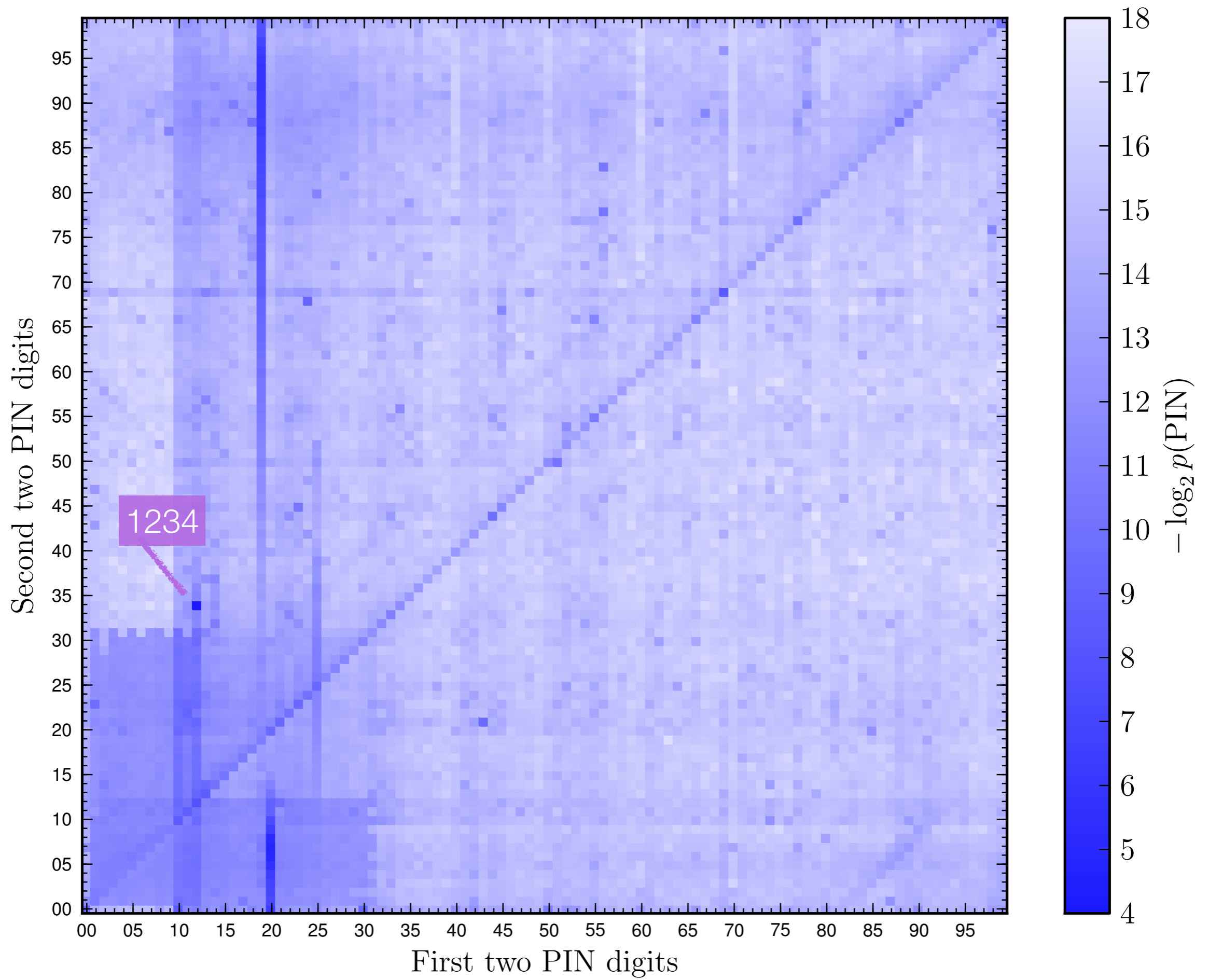
Source: Bonneau et al. "A birthday present every eleven wallets?"

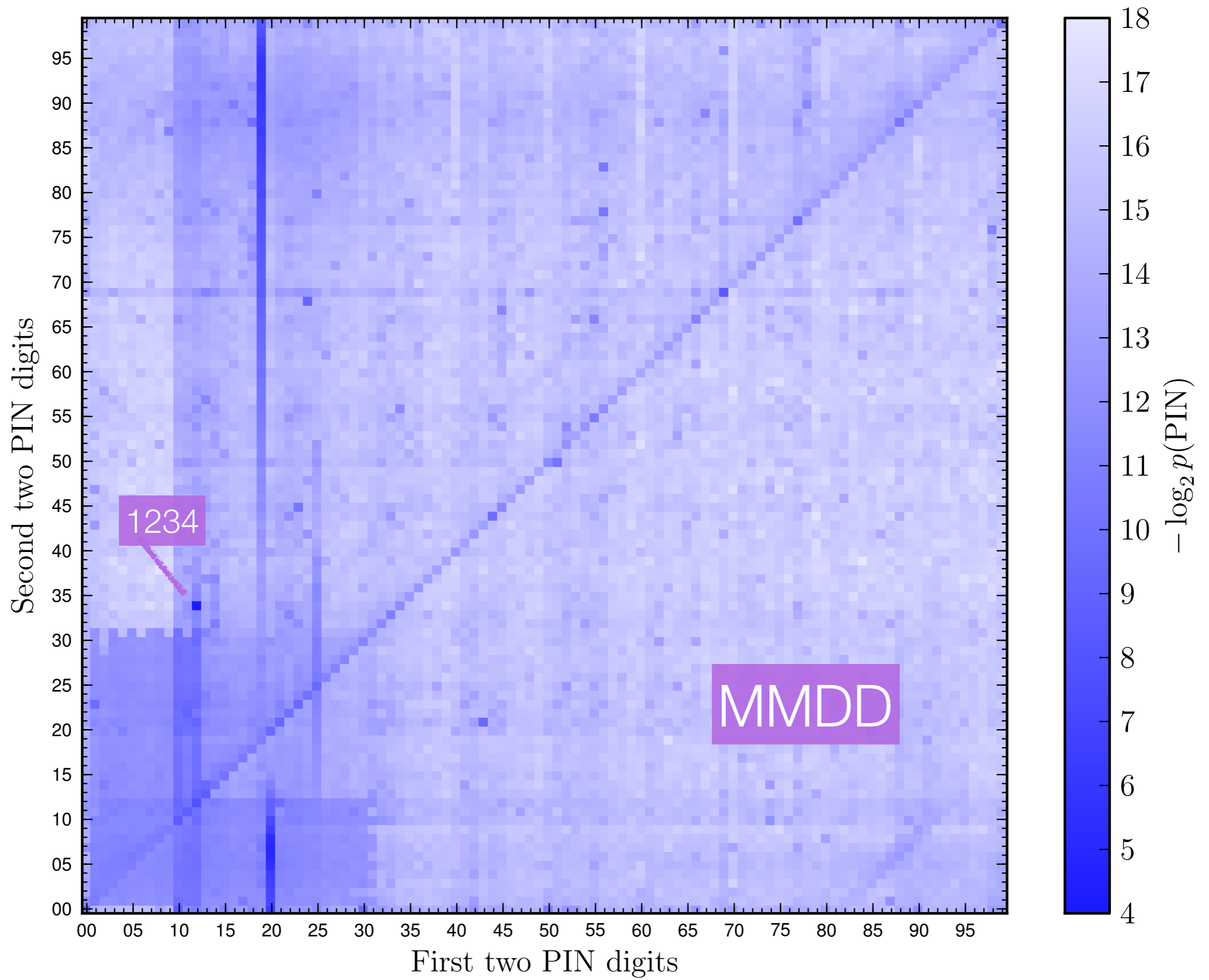


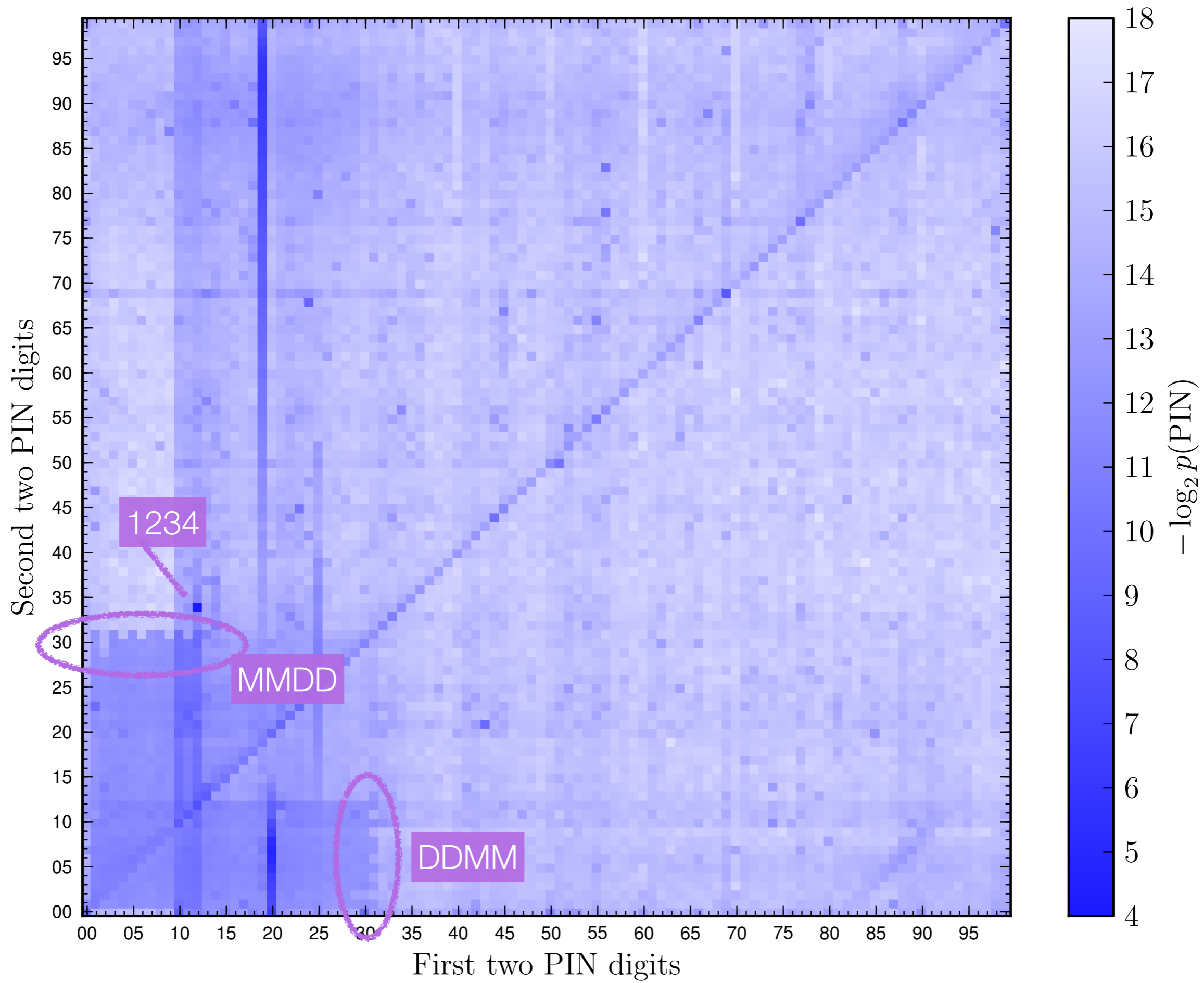


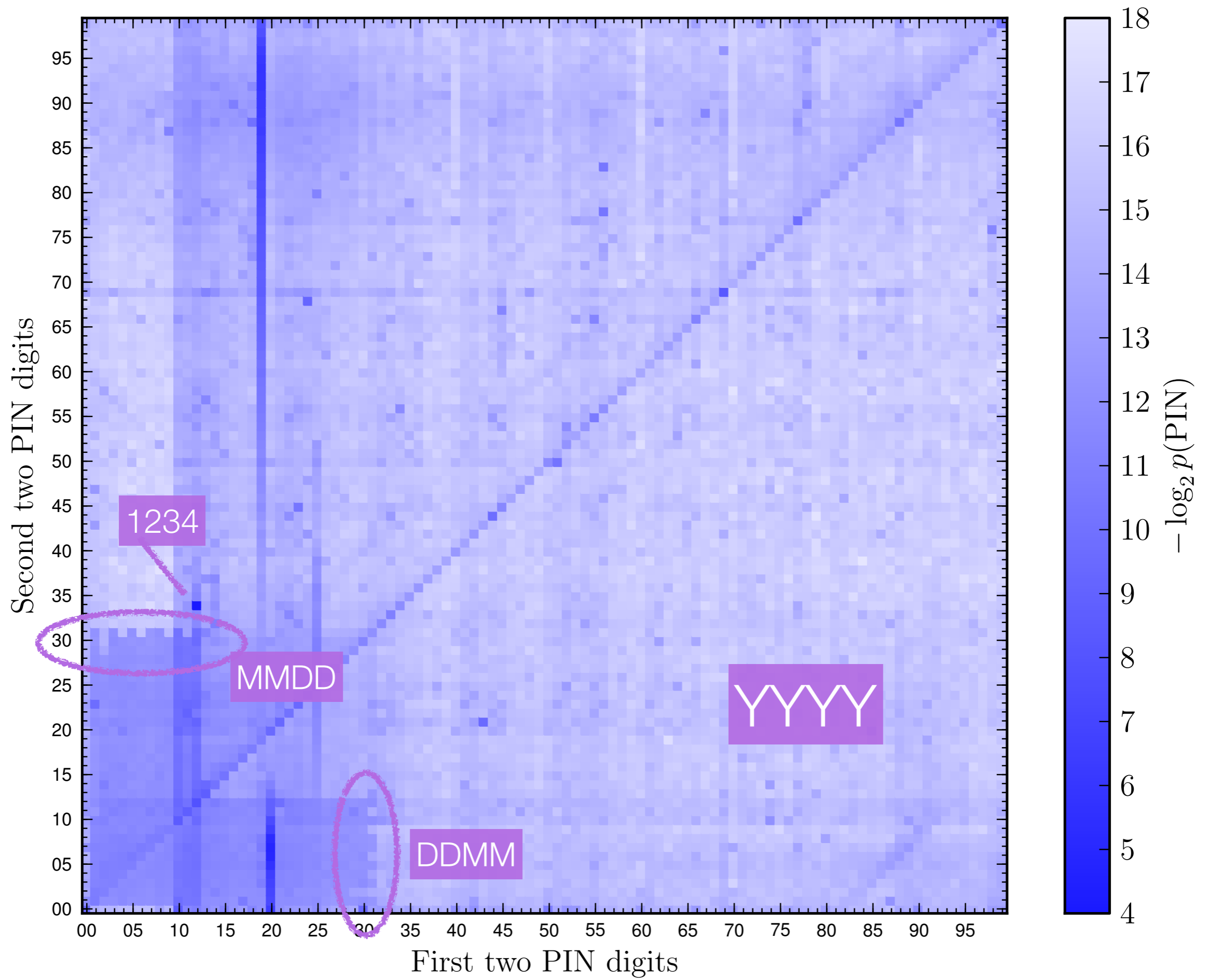


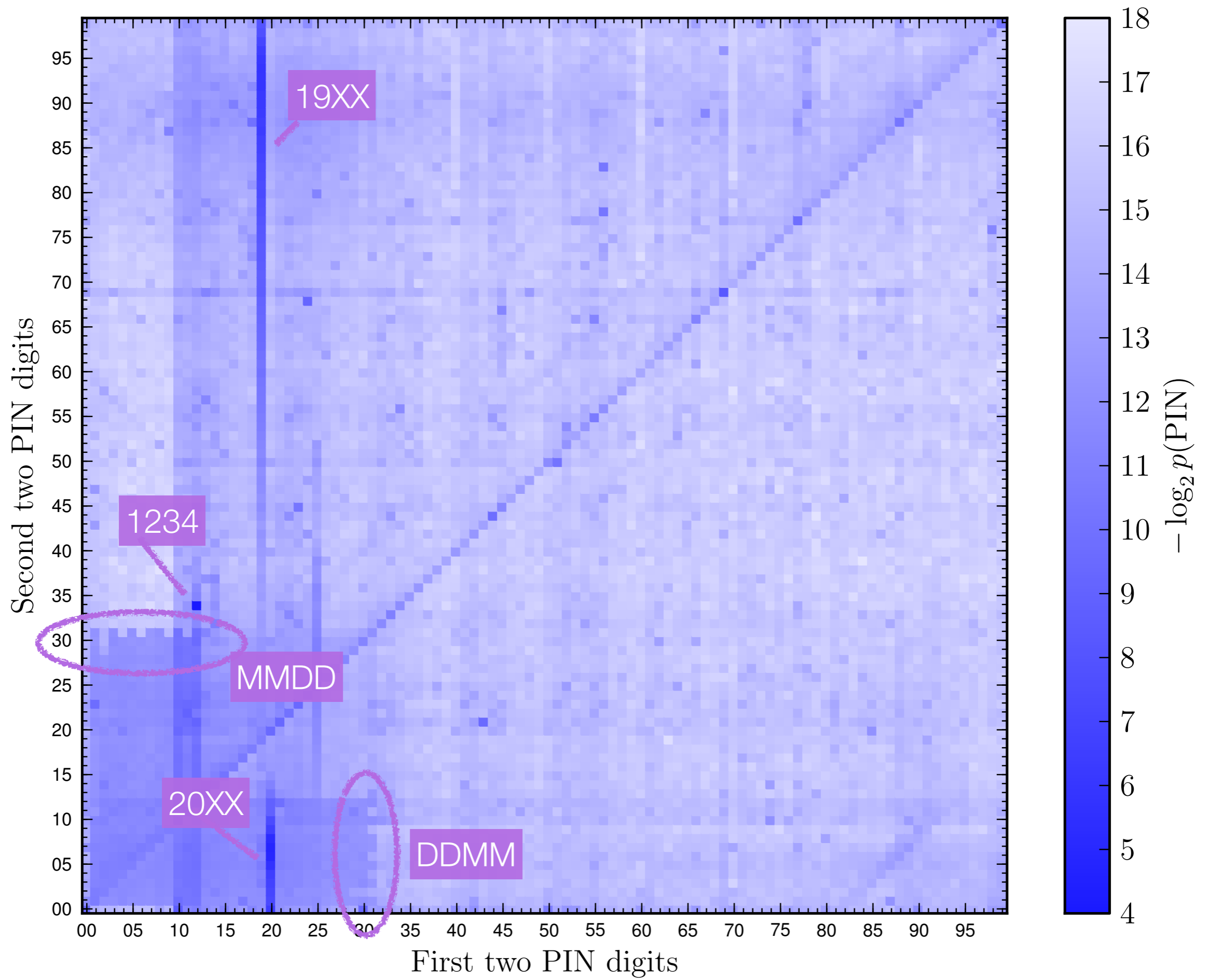


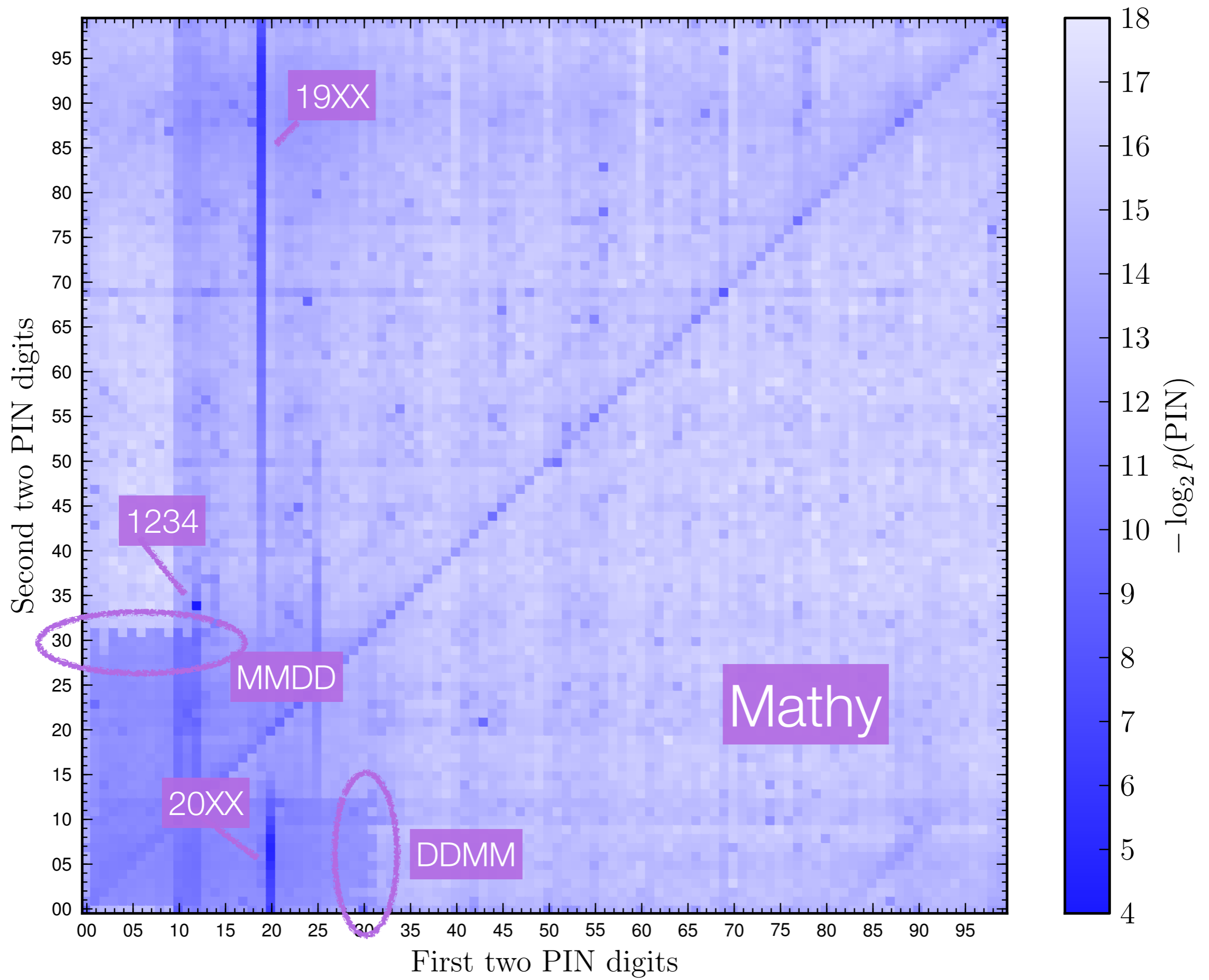


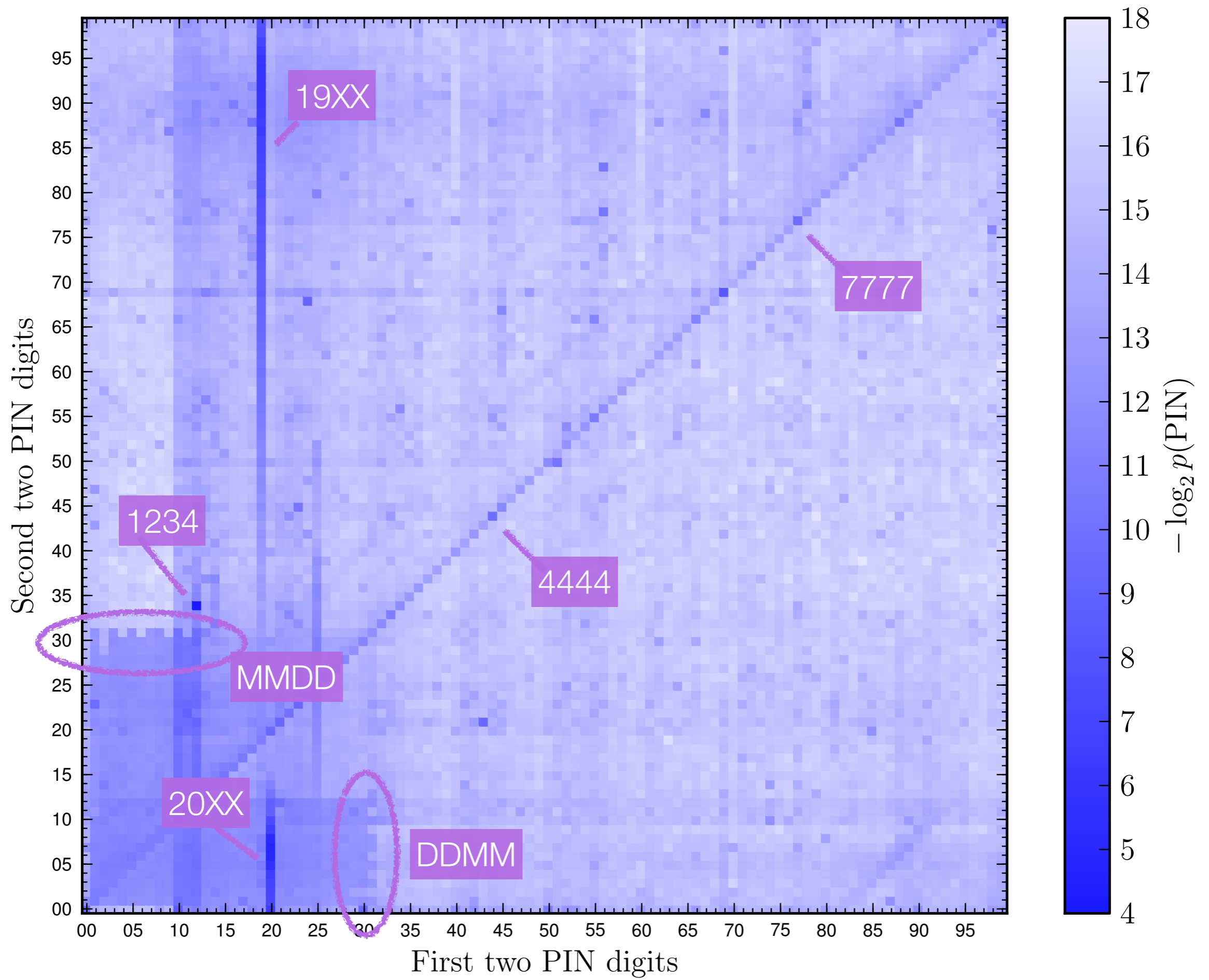


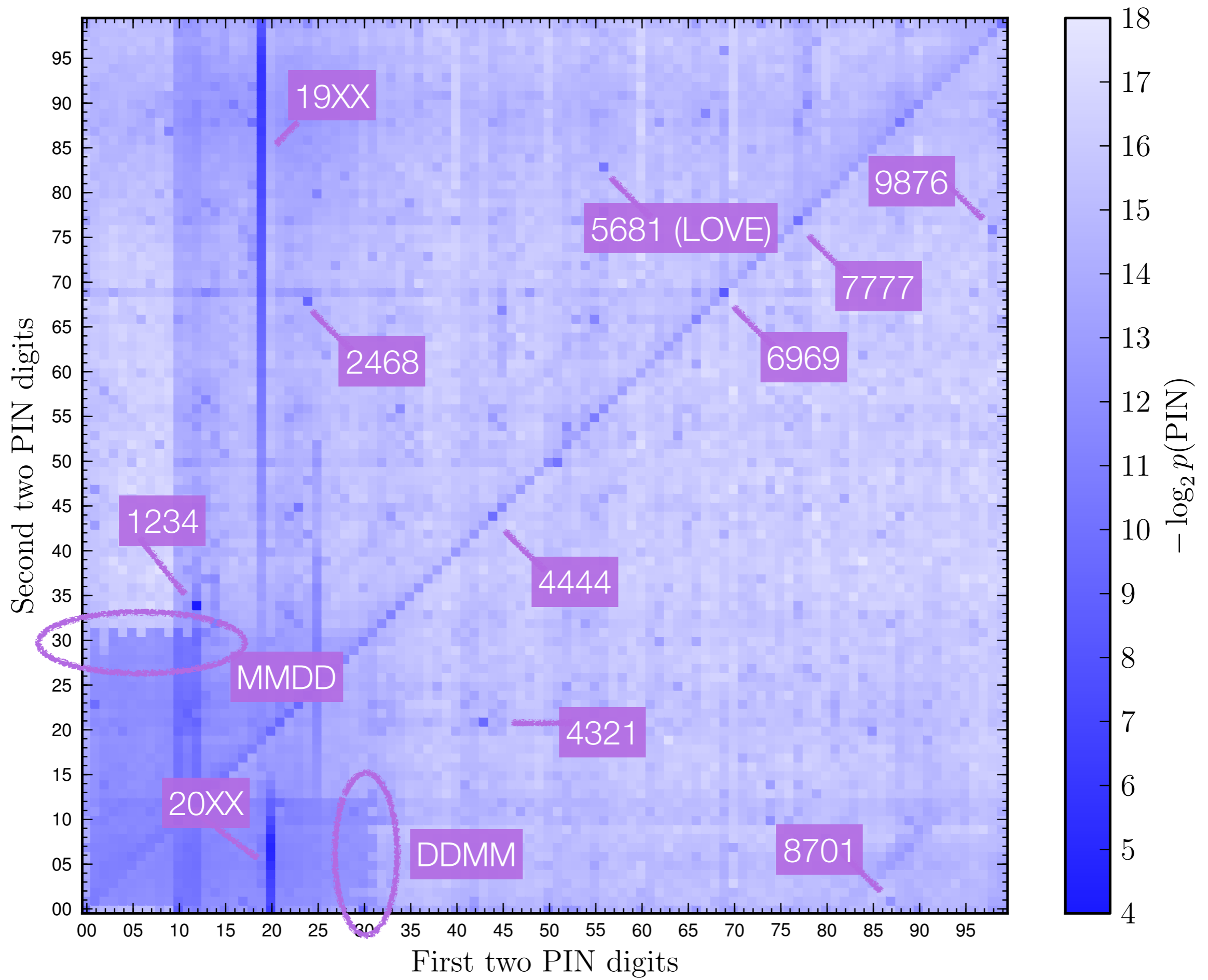












Act II

What is your most important password?

What's it worth?



Balance: \$10000
Username: XXXX
Password: XXXX
Price: \$_____



Balance: \$10000
Username: XXXX
Password: XXXX
Price: \$30



Act III

What is your least important password?



@mat

Twitter (@mat)
Password Reset

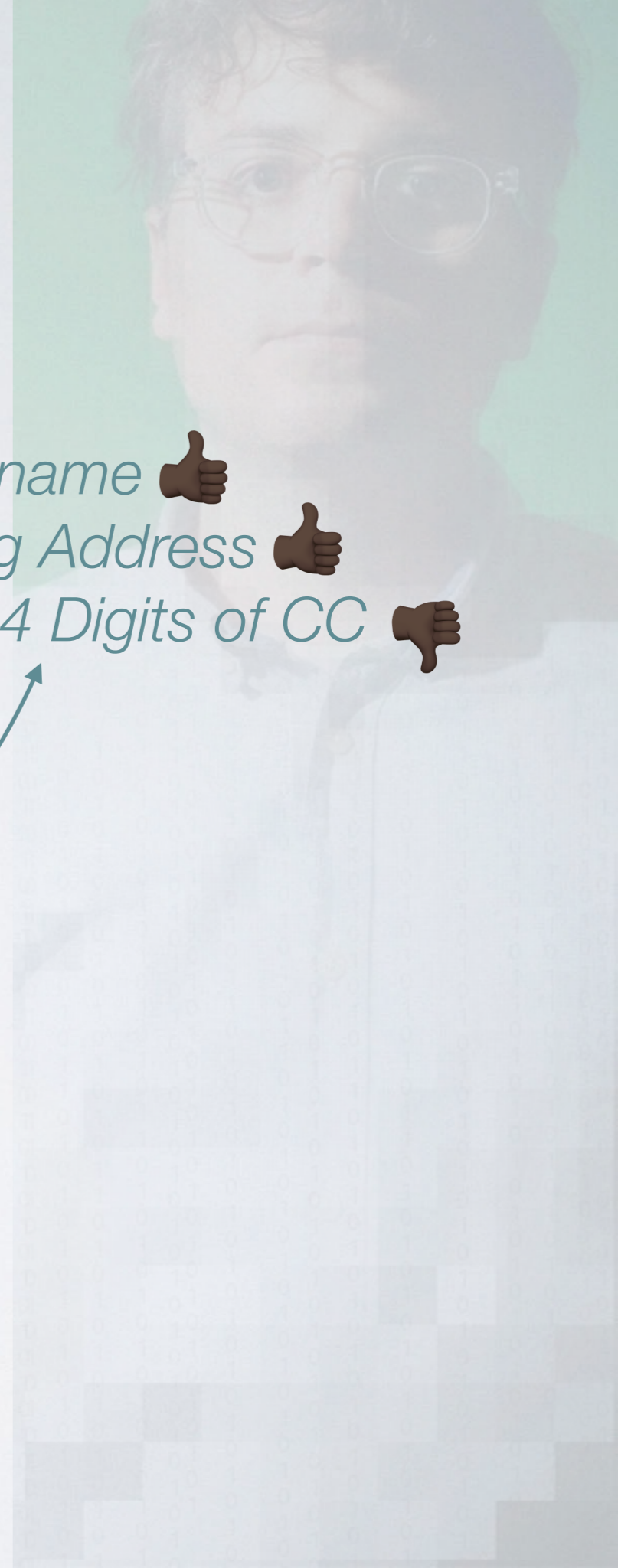
Email recovery (gmail)

Google
Gmail Password Reset

Email recovery (me)

Apple
iCloud Password Reset

- 1) Username 👍
- 2) Billing Address 👍
- 3) Last 4 Digits of CC 👎



Twitter (@mat)
Password Reset

Email recovery (gmail)

Google
Gmail Password Reset

Email recovery (me)

Apple
iCloud Password Reset

Amazon
Add Account: CC-2
Password Reset

Manage Credit Cards: See last 4 for each CC

- 1) Username 👍
- 2) Billing Address 👍
- 3) Last 4 Digits of CC 👎

1) Account Info 👍

- 1) Username 👍
- 2) Billing Address 👍

3) Last 4 Digits of CC-2 👍



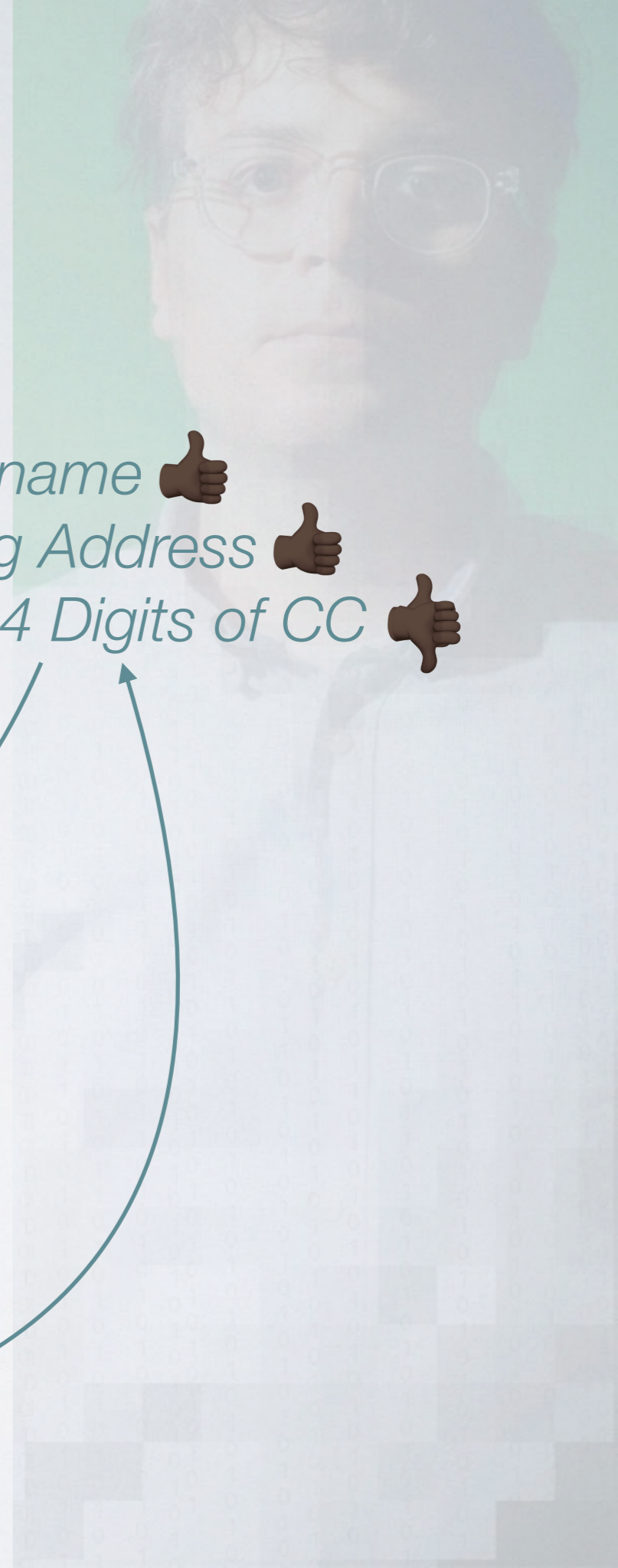
Twitter (@mat)
Password Reset

Google
Gmail Password Reset

Apple
iCloud Password Reset

Amazon
Add Account: CC-2
Password Reset
Manage Credit Cards: See last 4 for each CC

- 1) Username 🍌
- 2) Billing Address 🍌
- 3) Last 4 Digits of CC 🍌



What can I do?

Log in with Google or Facebook

Use your password manager

Enable two-factor authentication

What can I do?

Log in with Google or Facebook

Use your password manager

Enable two-factor authentication

Think about a threat model



Questions?

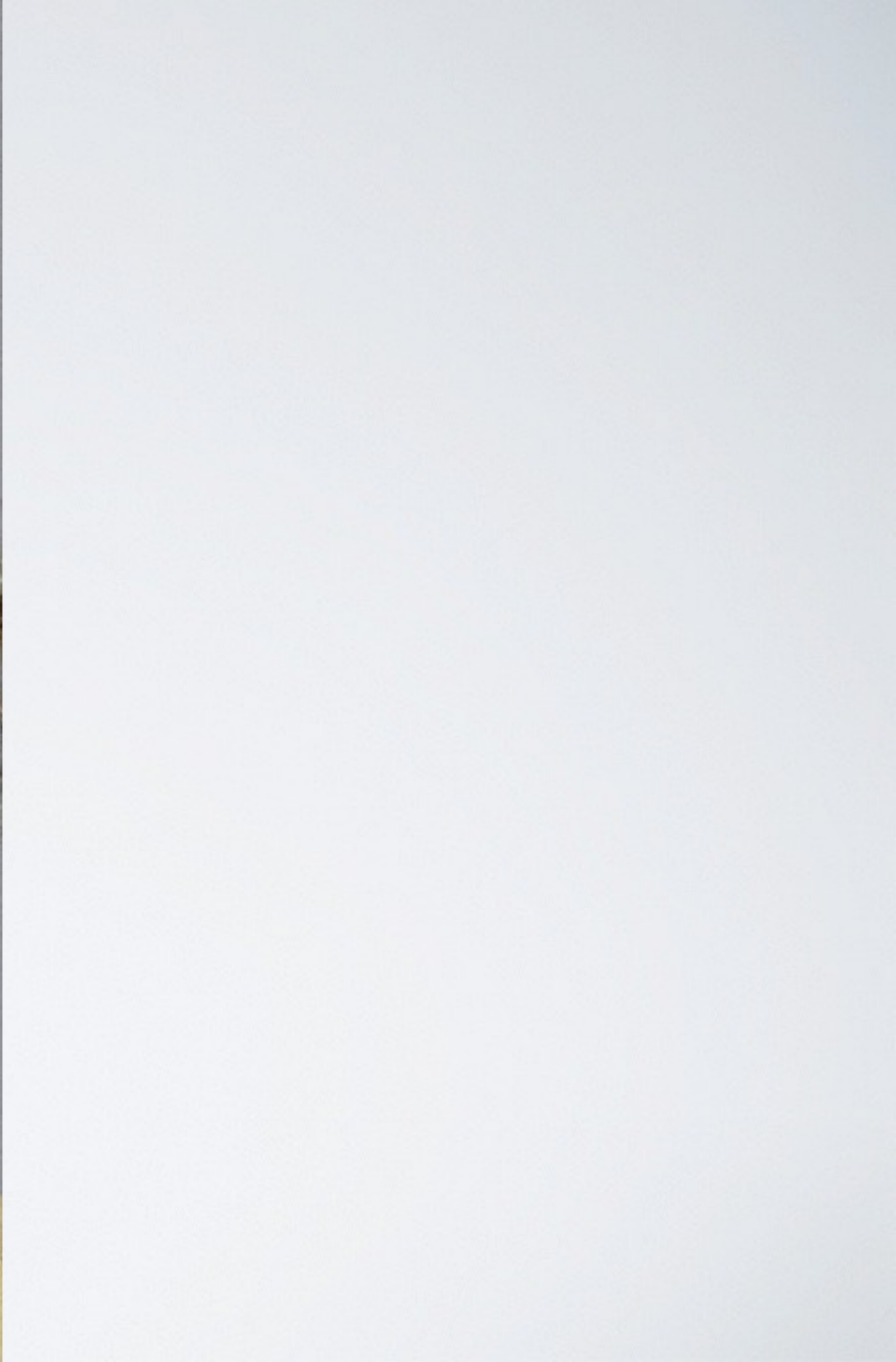
@PulpSpy
vaddr.space

“Cybersecurity”



PASSWORD

1010 1011 1100 1101
0010 0011 0100 0101
10000 10001 10010 10
1011 1100 1101 1110







Sarah Palin account info:
gov.palın@yahoo.com
DOB 2/11/64
ZIP 99687