

# Center for Encrypted Functionalities

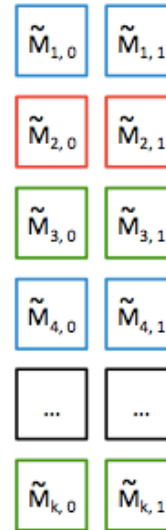


## Challenge:

- Can computer programs keep secrets?
- Can we achieve cryptographically secure **program obfuscation**?

## Solution:

- Explore new mathematical structures to process encrypted data and *selectively reveal* processed data.
- New mechanisms **and** cryptanalysis techniques.



## Scientific Impact:

- Need for programs with secrets is ubiquitous:
  - Intellectual Property
  - Protection vs. insiders
  - Group Key Agreement
  - Untrusted Cloud Computing

## Broader Impact:

- Efficient cryptographic obfuscation would be game-changer for many security problems.
- Robust outreach efforts to K-12, General Public, Undergraduate, Graduate, Postdoctoral, Women in CS and Crypto.