

# CSE 543 - Computer Security

Lecture 2 - Introduction  
September 7, 2006

# A historical moment ...

- Mary Queen of Scots is being held by Queen Elizabeth ...
- ... and accused of treason.
- All communication with co-conspirators encrypted.
- Walsingham needs to prove complicity.



# Intuition

- Cryptography is the art (and sometimes science) of secret writing
  - Less well known is that it is also used to **guarantee** other properties, e.g., authenticity of data
  - This is an enormously deep and important field
  - However, much of our trust in cryptographic systems is based on faith (particularly in efficient secret key algorithms)
  - ... *ask Mary Queen of Scots how that worked out.*
- This set of lectures will provide the intuition and some specifics of modern cryptography, seek others for additional details (Menezes et. al.).