# From physical to virtual conferences

Kevin McCurley & Kay McKelly

#### Take a historical view

Science started in local learned societies

- First learned society: Academia Secretorum Naturae in Naples, 1560-1578
  - Closed by Pope Gregory XIII
- Roman Academies became public institution in the 17th century
- Royal Society of London, 1660

Mostly local collaboration - travel was difficult

#### 17th century: Newton and Leibniz actually met in person in 1676



Travel was by horse-drawn carriages and sailing ships

## Impact of technology on scientific communication

- Early 19th century: train networks started to be built
- 19th century: first large scientific conferences
  - AAAS in 1848
- 1920s: air mail
- 1950s: international jet travel
- 1960s: international phone calls became routine
- 1970s: TeX, "desktop publishing"
- 1980s: email became widespread, LaTeX introduced
- 1990s: world wide web
- 2010: video conferencing in small groups

Why are we uploading files to HotCRP?

# Why do people attend face-to-face conferences?

The talks

Online videos of talks can replace much of this

- Computer scientists have always tied publication to a conference presentation
- Listening to a talk can provide different insight than reading a paper
- People who give good talks enhance their reputation
- Q&A offers the chance to question the author about their paper

Q&A is seldom very effective anyway. We can do better

- Perhaps most important: networking with others in the field
  - Meet new people
  - Make contacts for jobs and grants

This is the hard part

- Find new collaborations
- Connect a face and personality with the name on a paper

### 2020: virtual conferences

Don't think of virtual conferences as replacements for things that came before

Each technology finds a place in the fabric of scientific communication

We are at the dawn of an era in remote collaboration