



# ISMRM 27<sup>TH</sup> ANNUAL MEETING & EXHIBITION

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## Secret Session: Master coding in your research environment

### Version Control

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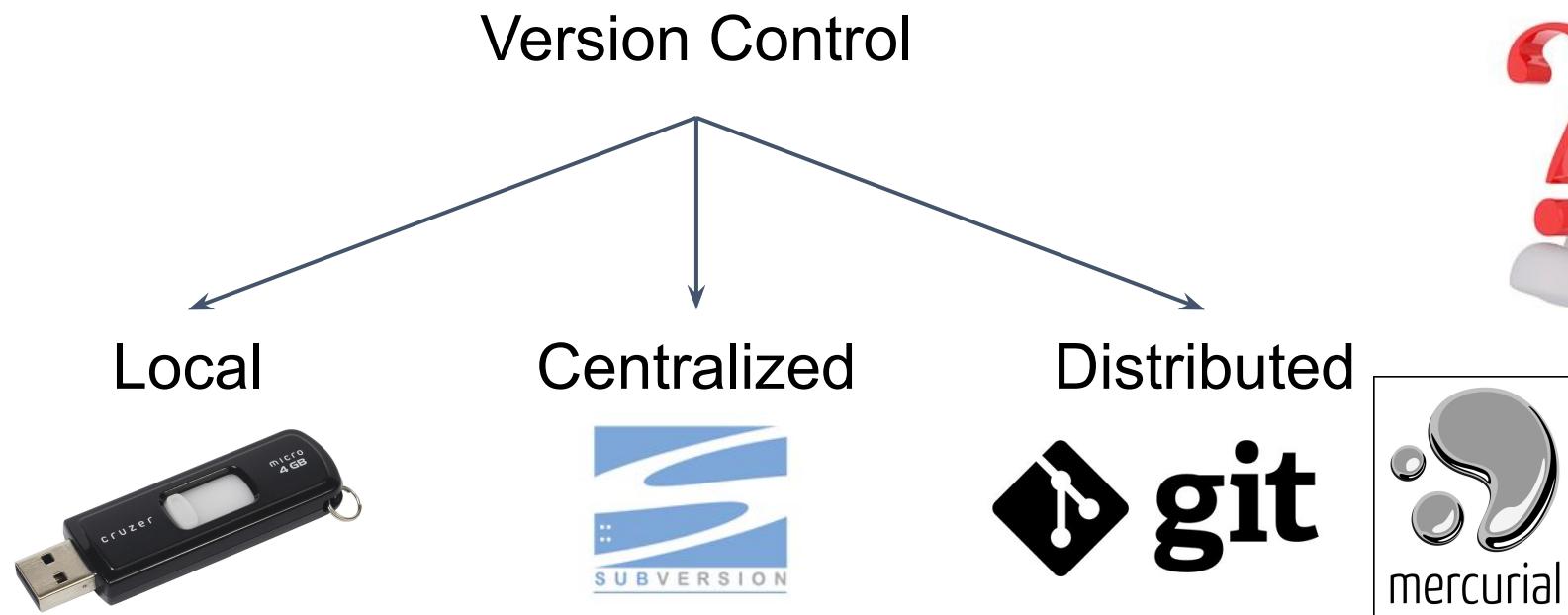


imeka 

DIPY

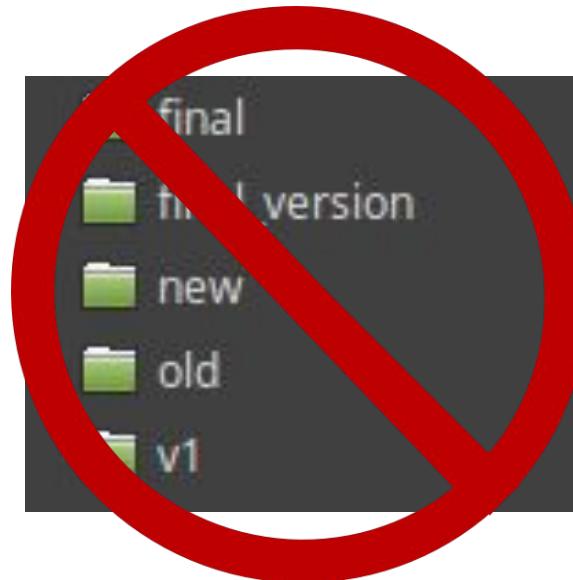
# What is version control ?

- System to keep track of changes in time  
(similar to Google Docs or Time Machine)
  - Code
  - Data
  - Text



# Why use version control ?

- History of your code



- Traceability
- Easiness of collaboration
- An easy backup!



# Which tool can we use to save the code ?

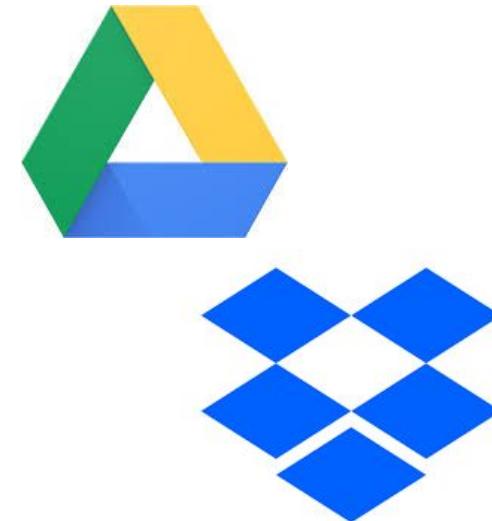
Desktop



USB/DRIVE



Cloud



Hosting services



# Which tool can we use to save the code ?

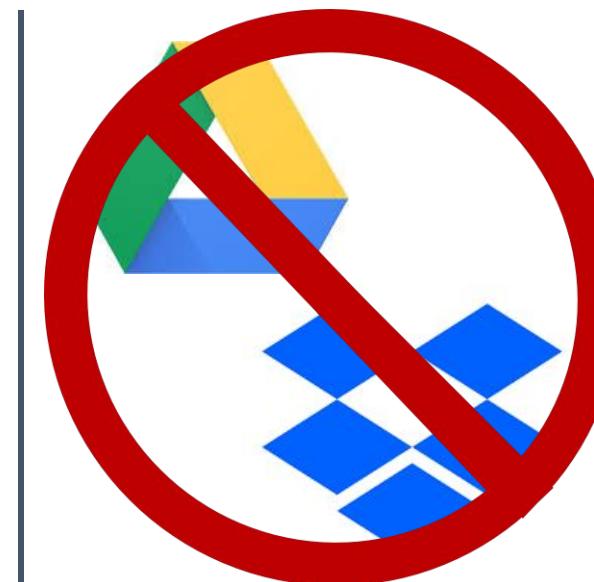
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# What are the main hosting services ?

Github



Bitbucket



Gitlab

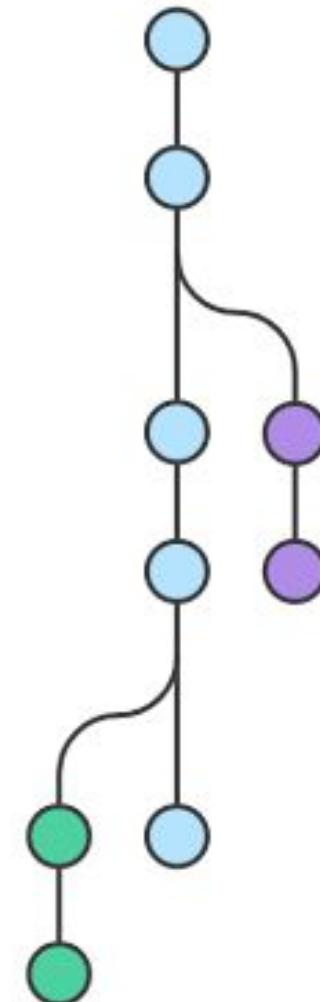


Mercurial



# History model (based on Git)

- **Master**  
Official “version”
- **Branch**  
Code deviating from **master**
- **Commit**  
“Snapshot” of the code to keep in the history
- **Merging**  
Bringing back the code from a branch to master.



# Protips (for Git, at least)

- Branches! Branches everywhere!
  - Bugfix: a branch
  - New feature: a branch
  - Testing 2 algorithms: 2 branches
- Atomic commits
- Clear commit messages
- Keep pull requests not too large

