Code Review

Building a community to talk about coding

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What is code review?

- Talking about code; line by line

- individual

- group

- in person

- remote

Motivation

- We spend a lot of time coding

- Very little formal education

- We just talk about the results

- Goal: Build a community to discuss coding

  - If you supervise students - bring this to your meetings

  - If not - start a group

  - Participate in code review of open source online projects

Benefits

- Catch Bugs

- Improve coding

- Get help thinking through design

- See different coding styles/approaches

- Learn best practices

- Learn about new packages and methods

- See all levels of code

- Know who to talk to

- Collection of examples

What to talk about?

- Does the code perform as expected?

- Are coding guidelines followed (e.g. PEP-8)?

- Is the code easy to read and understand?

- Is the code properly documented (e.g. doc strings, references to origin of algorithms)?

- Is the code written as efficiently/flexibly as it should be (e.g. hard coded values, use of functions and classes, use of objects)?

More to talk about

- Testing

- Licensing

- Compare to previous methods

- Dependencies

- More: see Astropy's CONTRIBUTING.md on GitHub