How to review a scientific paper

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Publication: Communication of scientific results

Report original empirical or theoretical work

Review process = Quality control to ensure the suitability of a submission for publication





Process

- 1. Author submits paper to journal
- 2. Formal check by publisher
- 3. Quick check by editor
 - 1. In scope of the journal
 - 2. Language
 - 3. Importance and scientific quality
- 4. Assignment of an associate editor
- 5. Selection of reviewers





Who are the reviewers?

- Researchers knowledgable in the field and the topic
- Selected and invited by the editor/associate editor
 - Personal information
 - Publications
 - Author suggestions





What to do as a reviewer?

- Read the abstract (provided with the invitation) and judge if you are competent or not
- Check if you have a conflict of interest with the authors
 - Same institution
 - Recent or frequent co-author
- Check if you have time to meet the deadline
- Respond to editor (also if NO)





Reviewing is good for you

- Careful reading of a paper
- Information on newest results (before publication)

Take enough time for the review

- First reading - time - second reading





What do we expect from reviewers?

- Clear opinion and suggestion for decision
 - Scientific content
 - Novelty
 - Importance
 - Presentation

Will the reader profit from reading this paper?





Novelty

- Are the results already known?
 - Software to check plagiatism
 - Self-plagiatism is frequent
 - Is the paper incremental?
- Is the paper presenting new developments or is it an application for a different case?
 - Does the application provide new insights?





- Have the authors overlooked previous work?
- Are the methods appropriate?
- Do results support conclusions?
- Can one understand the derivations?
- Is the paper boring?





Style of the review

- Keep to the facts
- Don't insult the authors
- Don't rewrite the paper
- Even if you are suggesting acceptance pls provide reasons

In case of rebuttals remain objective





Thank you for your attention!



