While some scientific communities have a culture of providing timely and thoughtful reviews, others have a culture of providing late and pathetic reviews. Do not contribute to the latter, regardless of the standards (or lack thereof) in your community. If you are being asked to review a paper, it is likely that you have or will submit a paper for publication. Write the type of review that you would like to receive. Here I enumerate what I consider to be some important features of a good review.

- 1. **Summary.** Begin your review with a short, one paragraph, summary of the paper. This summary should describe: (1) the general area addressed by the paper; (2) the general approach of the paper; and (3) the results or conclusions drawn in the paper. The purpose of this summary is to assure the authors that you understand the central ideas in their paper.
- 2. **Overall evaluation.** Give a short, one paragraph, evaluation as to: (1) the importance of the general area; (2) the soundness of the general approach; and (3) the validity of the results or conclusions. This overall evaluation is particularly helpful for the editor. Include also your overall recommendation: accept as is, accept with minor revisions (second review not necessary), possibly accept with major revisions (after a second review), or reject.
- 3. Specific comments. Following the overall evaluation, provide specific comments about the paper. This should include serious concerns that you have about the validity or correctness of the methods, results, or conclusions. This might include, for example, an error in a derivation, an analysis that you think is lacking in the author's results, or over-reaching or unsupported conclusions. These concerns should be followed by other minor concerns, including, typographical errors, missing references, or comments to improve the clarity or readability of the paper. When pointing out specific errors, make note of the page/section/paragraph to make it easier for the authors to make corrections. Also, number each of your comments, so that, should they have to, the authors can respond specifically to each of your comments.
- 4. **The good and the bad.** A review is, by design, meant to point out the parts of the paper that need improvement. Take a moment, however, to say a few words about what aspects of the paper you like. For example, the paper is particularly well written, the paper addresses an important problem, the paper, though perhaps not perfect, provides important insights. etc. This will make it more likely that the author's will view your other comments as constructive, as opposed to confrontational.
- 5. Accept or reject. Making the final decision to accept or reject can be difficult. It is borderline papers that are particularly difficult -- those that have some interesting insights, but also have some serious deficits. In these cases you should consider the scope and quality of the journal or conference to which it was submitted. And, if you are unsure, then explain to the editor precisely your concerns. In the end, it is the editor's job to make a final decision, they are simply looking to you for expert advice.
- 6. **Be objective.** It is likely that you will be asked to review a paper in an area in which you are working. Do not take this opportunity to promote your own work or your specific views on the field. Remain objective, and judge the paper on its merits. If the author is a friend or collaborator, it may be difficult to remain objective -- ask the editor for advice before agreeing to review the paper.
- 7. **Be conscientious.** When you agree to review a paper, you are agreeing to supply the editor and the authors with a timely and thoughtful review. If you think that you cannot do so, either because the paper is outside of your expertise, or you are too busy, then decline the review (as a courtesy try to suggest alternate reviewers to the editor if you decline the review). If you do accept the review, then you should be diligent, and return a thorough and well-reasoned review in a timely manner.