

Presenting Literature (Paper) Review

Here are some hints on how to properly present literature (paper) review using slides.

1. Do not overload slides with tons of technical details, which cannot be digested by your audience anyway. Include only the most important/relevant points in a concise format.
2. Begin with complete title of the paper, including authors, title, journal/conference, volume, issue, pages, month and year (see published IEEE journal papers for examples).
3. What is the purpose of the paper or the problem considered/solved there? Formulate it concisely in words, without equations (you will add equations later on). E.g., “secrecy rate maximization subject to power and interference constraints”. You may also include channel/system model as well (in words, no equations), e.g. “in Gaussian MIMO wiretap channel with single Tx/Rx but multiple eavesdroppers, no fading”.
4. How do they solve it? Analytically? Via algorithm? What are the key ideas and limitations? What approximations do they use? Do they prove algorithm’s convergence (global/local/ no at all)? No equations yet.
5. Give some key (not all) technical details in a concise format (omit technical details if too many – this is not a detailed report but just an overview): system/channel model, problem formulation, solution/algorithm. Is the solution/algorithm better than that known in the literature? How? This has to be concise as well.
6. Summarize: strong/weak points (complexity/convergence for algorithms, new understanding/insights/effects/phenomena for analytical solutions), gaps, your overall assessment (on the scale 0 to 5). Include citations number.
7. For each paper, use not more than 4-5 lightly loaded slides. Number all slides and equations.
8. Compare all reviewed papers to each other (e.g. via table): which is the best? worst? why?

Overall, your literature review must present a coherent picture of what is going on (where each paper stands with respect to all others). It must not be a collection of abstracts (“cut-and-paste”). It should demonstrate to the audience that you mastered this area, see it clearly and are ready to move ahead at full speed.