Light Dark Matter Workshop Talk Guidance

Overview Talks

These are 30-45 minute talks, but the speaker should plan for half slides and half discussion. The goal is to concisely lay out the landscape in each area and highlight the issues that need to be addressed to make progress. It is good to be provocative, although not inflammatory.

Theory/Technology Talks

These are 30 minute talks whose goal is to concisely describe what is known, and what remains to be understood, about light dark matter particle interactions with normal matter. The technology talks should focus in general on how the technique works, rather than specific implementations (e.g. what is a TPC, rather than this is the how the LZ/Xenon/PandaX/etc TPC was designed).

Ideas for Future Experiments

These are short (10-15 minute, 5-8 slide) talks, which should have only a few key slides. Speakers should plan for discussion during the slides. These must follow the following structure:

1. Brief introduction to the technology (if not covered in the overview talk) and proposed experiment
2. Key (sensitivity-limiting) issues that need to be addressed and proposed R&D to accomplish them
3. Estimate of sensitivity reach with assumptions clearly identified
4. Estimate of resources and timescale needed for an experiment

New Ideas Talks

These are 30 minute talks whose goal is to highlight new technologies and/or new theoretical ideas that may bear fruit in light dark matter searches in the future. They should follow the same guideline as the Ideas for Future Experiments, but may be longer and more detailed. They should plan for about 20 minutes of talk, with 10 minutes of discussion either during or after the slides.

Panel Discussion

The idea is to have a panel of people who will start the discussions by giving short perspectives on what they have learned at the workshop and directions they consider promising. We expect this to lead to lively discussions, which a moderator will try to keep focused.