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*Proposal Writing: Hints for Improving Your Chances of Getting Beam Time**

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* From a talk by Jonathan Lang at the National Neutron/X-ray Scattering School held at ORNL and ANL May 2009

How Does This Guy Know the Secrets?

- **Part of my responsibility at the Advanced Photon Source is to:**
 - Organize and oversee the Proposal Review Panels (PRPs) that review proposals for APS beamtime.
 - *This means I hear ALL the complaints from the PRP members regarding proposals that don't meet their expectations.*
 - I also handle all the Appeals by PIs regarding their proposal ratings and beamtime allocations.
 - *This means I hear ALL the complaints from the proposal writers regarding proposals that did not get beam time.*

Proposals: General Information

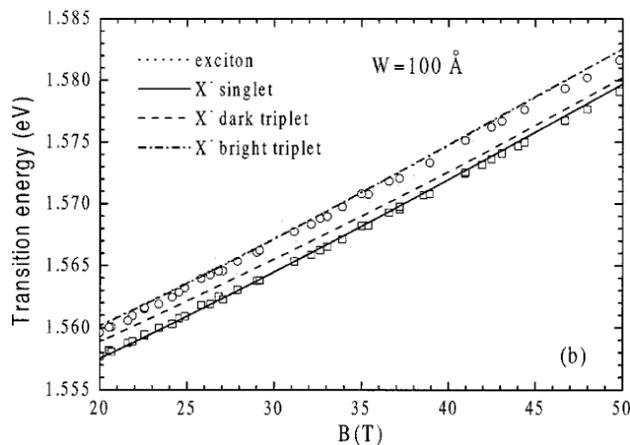
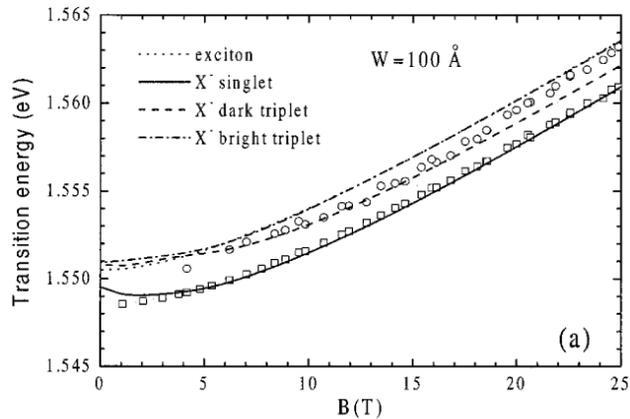
- **Pick a good title.** Boring and to the point is better than spectacular and vague.
 - Good: “XAS study of Fe valence in CaFe_2As_2 under pressure”
 - Bad: “Understanding superconductivity in iron pnictides”
- **Fill in the abstract.** Do not just upload a PDF document!
 - More work for reviewer.
- **Do upload a publication from previous work** (mention previous proposal).
 - Shows you made good use of beam time.
 - But do not upload 20 pages of supplemental information (couple of plots with text OK)

Experimental Details

- **Give background information why it is important.**
 - Provide background on importance (i.e. “bigger picture”)
 - Science at facilities very diverse. Good chance reviewer not expert in polymers, catalysts, superconductors, etc.
 - @ APS each committee gets ~60 proposals each cycle (~700 total/cycle)



Experimental Details



■ Clearly state what you want to measure and how.

- Give details but do not get too verbose (see last bullet above). Include temperature range, X-ray energy, sample geometry, etc.
- What sample characterization has been done already? (XRD, SEM, etc.)
- Reviewer needs to judge if experiment is feasible:

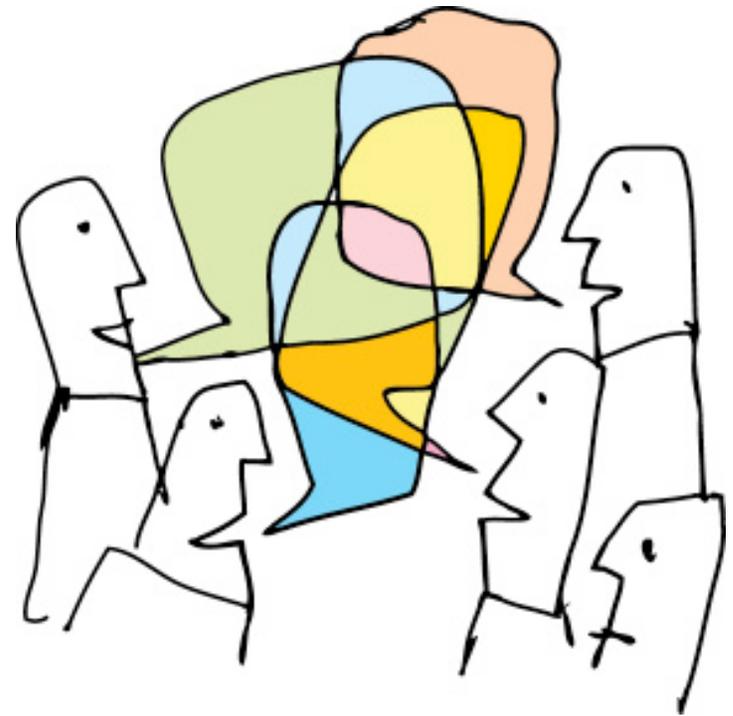
- *Are asking for the right instrument?*
- *Does x-ray energy match laser penetration depth?*
- *% of dilute atoms OK for fluorescence measurements?*

■ If you have previous results from other experiments include them!

- Home, other institution, previous experiment.
- Sample characterization.

Communication is Key

- If you are a first time user, talk to the local contact/instrument scientist; they love to talk about their work, instruments, and capabilities.
 - Find out about details of the instrument, typical measuring times...
 - Send them the proposal ahead of time and ask for advice.
 - Ask if they are interested in collaborating.
 - These scientists are busy, but it is part of their job to help you.
 - Don't forget to thank them for their time.



Questions???