

INTRODUCTIONS

Outline (Group 1)

Fri. Feb. 5: 4:20 - 5:30 PM

- 1) Outline, Introductions – 10 minutes
- 2) Homework – Google account, Upload data, IGOR, SasView – 10 min
- 3) Virtual VSANS Instrument Tour – 30+ min
- 4) Introduction to Experiment – 10 min

Mon. Feb. 8: 2:00 - 5:30 PM

- 1) Pol-beam Lecture - 50 min
- 2) Dr. Dario Arena's Lecture - 30 min
- 3) Coffee break - 30 min
- 4) Recap of spin selection rules - 10 min
- 5) Reduce NG7 SANS data in IGOR – 45 min
- 6) View VSANS Data in IGOR, then reduce via Python executable. Compare full-pol, half-pol, and unpol results - 35 min

Wed. Feb 10: 2:05 - 5:30 PM

- 1) Analyze CoFe₂O₄ spin-canting via SASView – 85 minutes
- 2) Coffee break– 30 min
- 3) Finish CoFe₂O₄ conditions and try more crystalized version - 60 min
- 4) Custom modeling and absolute scaling - 30 mi

Outline (Group 2)

Fri. Feb. 12: 4:30 - 5:30 PM

- 1) Outline, Introductions – 10 minutes
- 2) Homework – Google account, Upload data, IGOR, SasView – 10 min
- 3) Virtual VSANS Instrument Tour – 30+ min
- 4) Introduction to Experiment – 10 min

Wed. Feb. 17: 2:05 PM - 5:30 PM

- 1) Pol-beam Lecture - 50 min
- 2) Dr. Dario Arena's Lecture - 30 min
- 3) Coffee break - 30 min
- 4) Recap of spin selection rules - 10 min
- 5) Reduce NG7 SANS data in IGOR – 45 min
- 6) View VSANS Data in IGOR, then reduce via Python executable. Compare full-pol, half-pol, and unpol results - 35 min

Feb. 19: 2:05 - 5:15 PM

- 1) Analyze CoFe₂O₄ spin-canting via SASView – 85 minutes
- 2) Coffee break– 30 min
- 3) Finish CoFe₂O₄ conditions and try more crystalized version - 45 min
- 4) Custom modeling and absolute scaling - 30 mi

Items To Do Before Monday's Class

[//ncnr.nist.gov/summerschool/tutorials/VSANS_2021/](https://ncnr.nist.gov/summerschool/tutorials/VSANS_2021/)

Directions (given in Word document and webpage versions):

Download all files/folders from the above address

To run Python data-reductions you'll need a Google account (to use Google's Colab).

Install IGOR Pro with SANS Modules

(<https://www.nist.gov/ncnr/data-reduction-analysis/sans-software>)

Install SasView 5.0.4 (<https://github.com/SasView/sasview/releases>, 5.0.4 Assets)

My email is kathryn.krycka@nist.gov. Jeff Krzywon (jeffery.krzywon@nist.gov) will be helping trouble shoot installation issues.