

# Advanced Light Source

An aerial photograph of the Advanced Light Source (ALS) facility at Lawrence Berkeley National Laboratory. The central focus is a large, circular building with a prominent, light-colored dome. The facility is surrounded by a dense campus of various buildings, parking lots, and green spaces. In the background, a large body of water (San Francisco Bay) is visible, with the Golden Gate Bridge and distant hills under a clear sky. The text "Advanced Light Source" is overlaid in white, sans-serif font across the middle of the image.

# **Increasing the structure determination success rate**

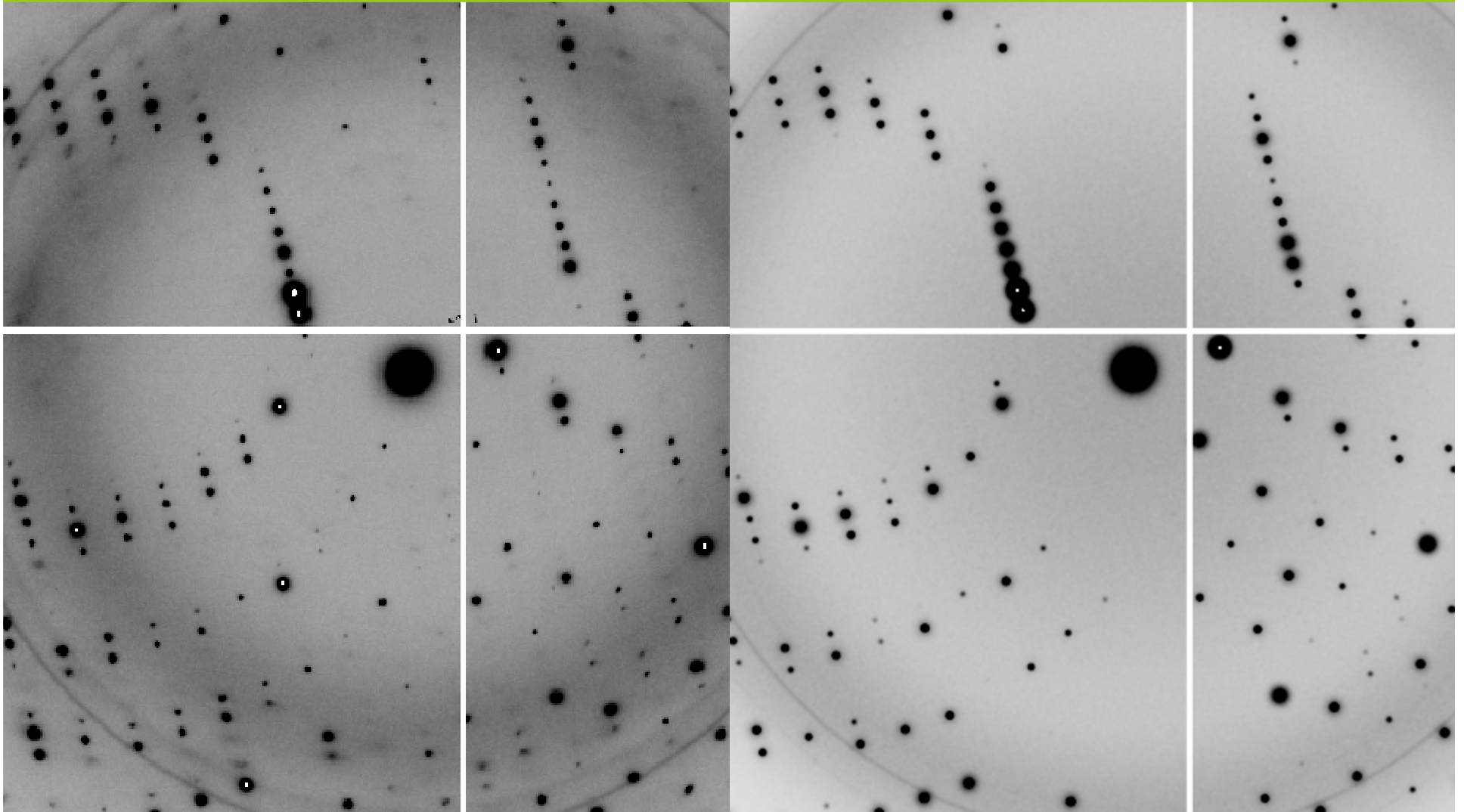
## **1 Crystal triage technology**

- a) Simulate the experiment to discover minimum required data quality**
- b) Understand radiation damage**
- c) Combine these criteria into smarter strategy programs**

## **2 Improve screening infrastructure**

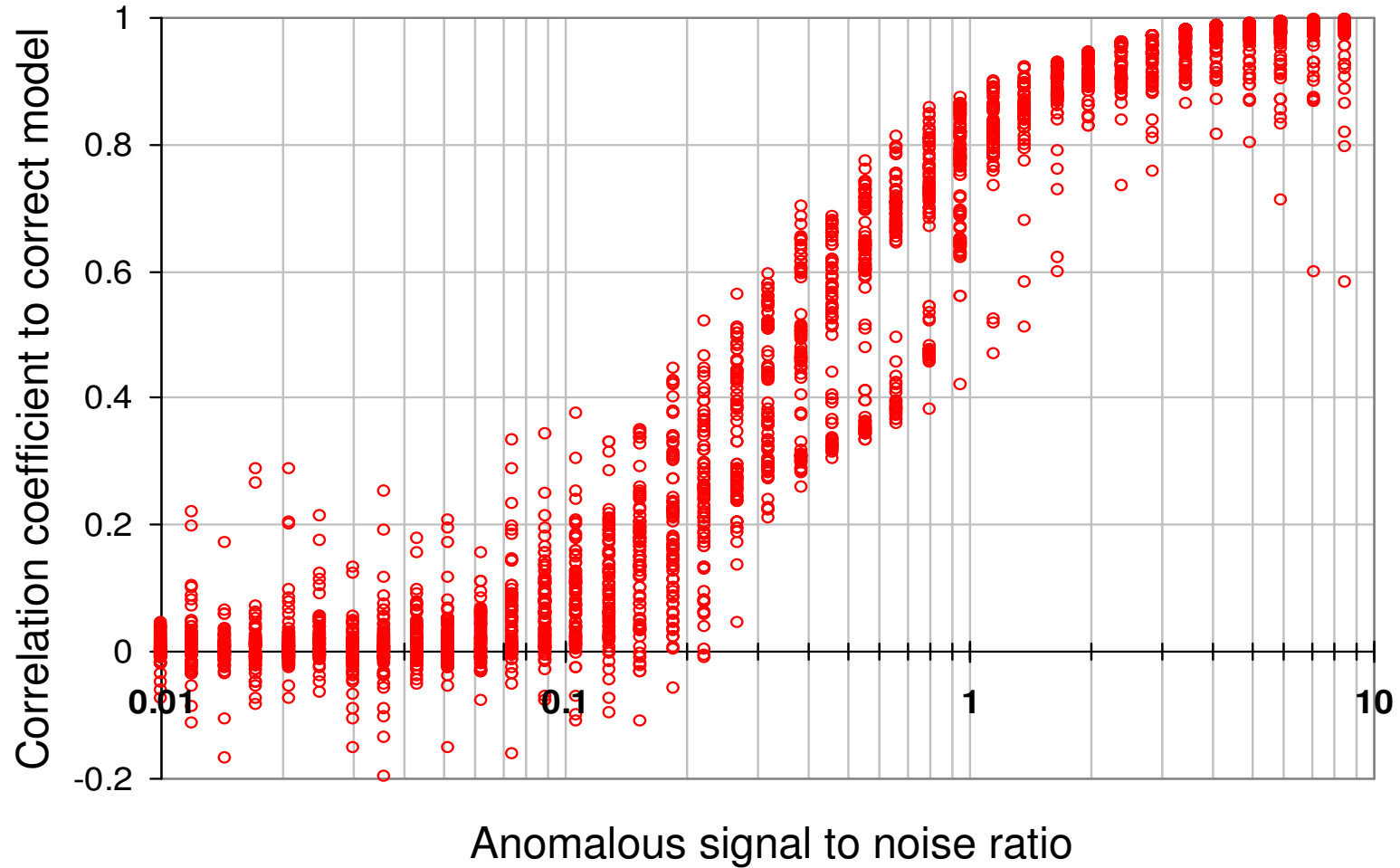
- a) offline targeting and unattended execution**
- b) Room temperature tray screening**

# Is it **real**, or is it **MLFSOM**?

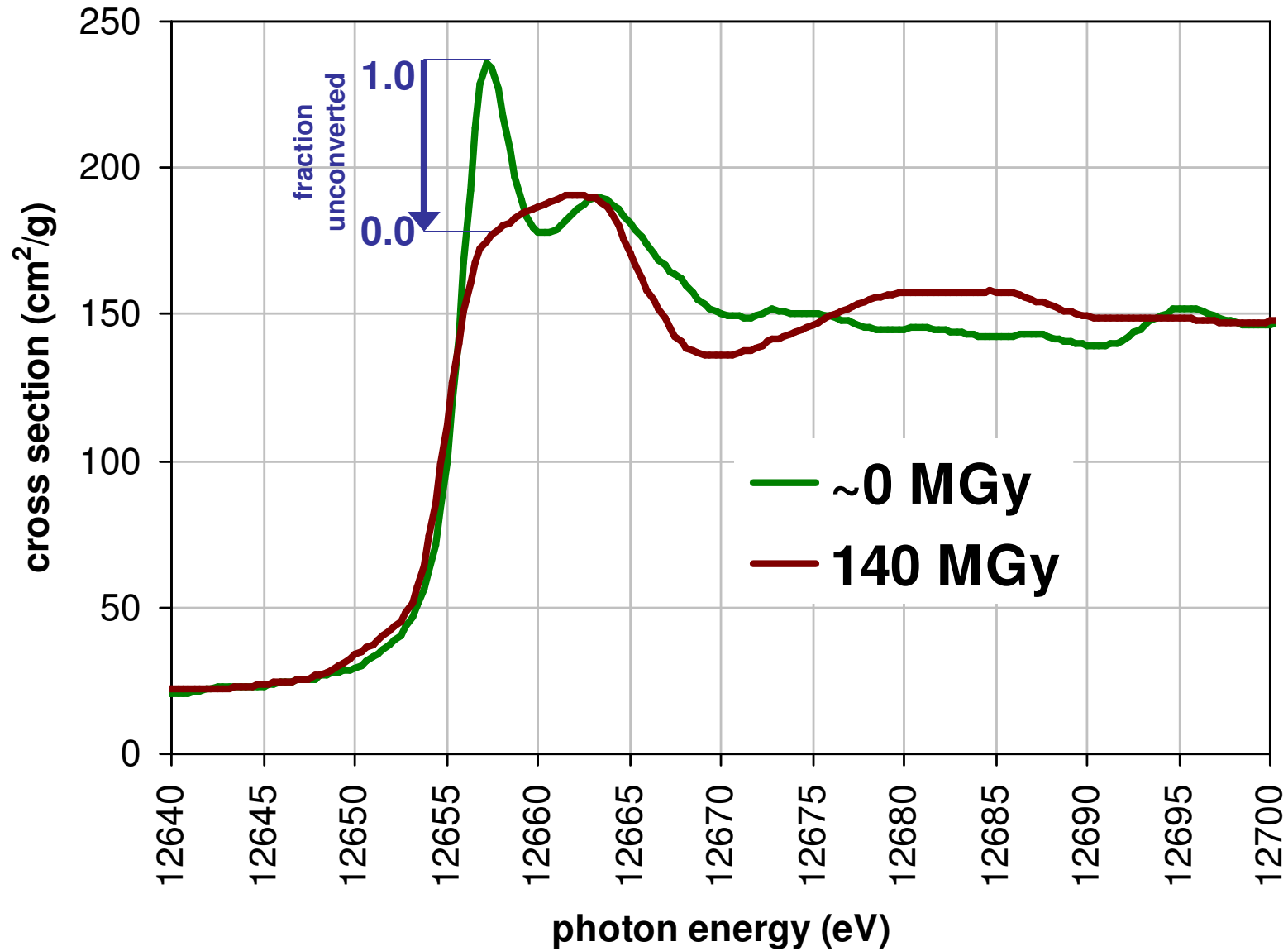


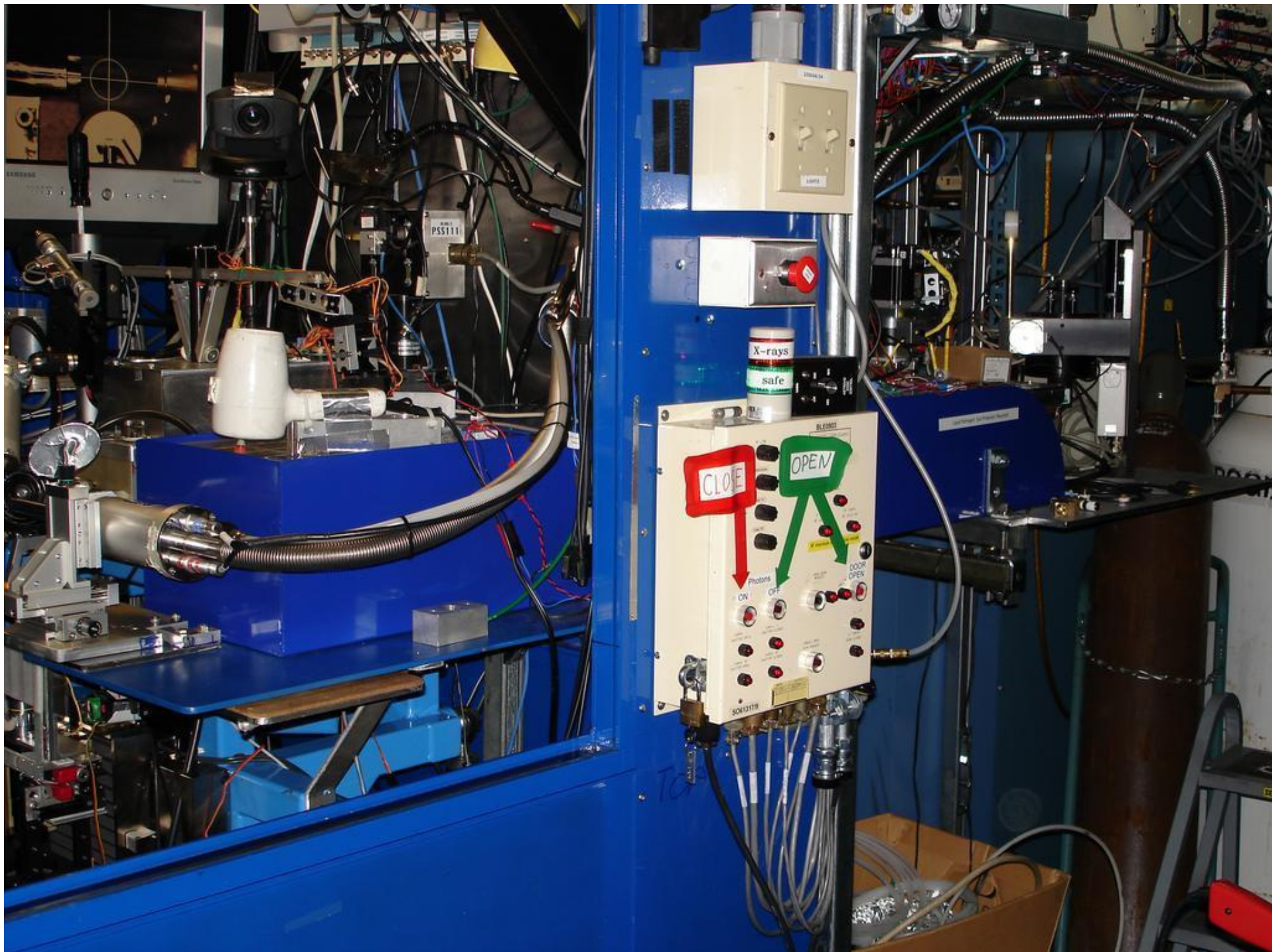
# MAD phasing simulation

## mlphare results

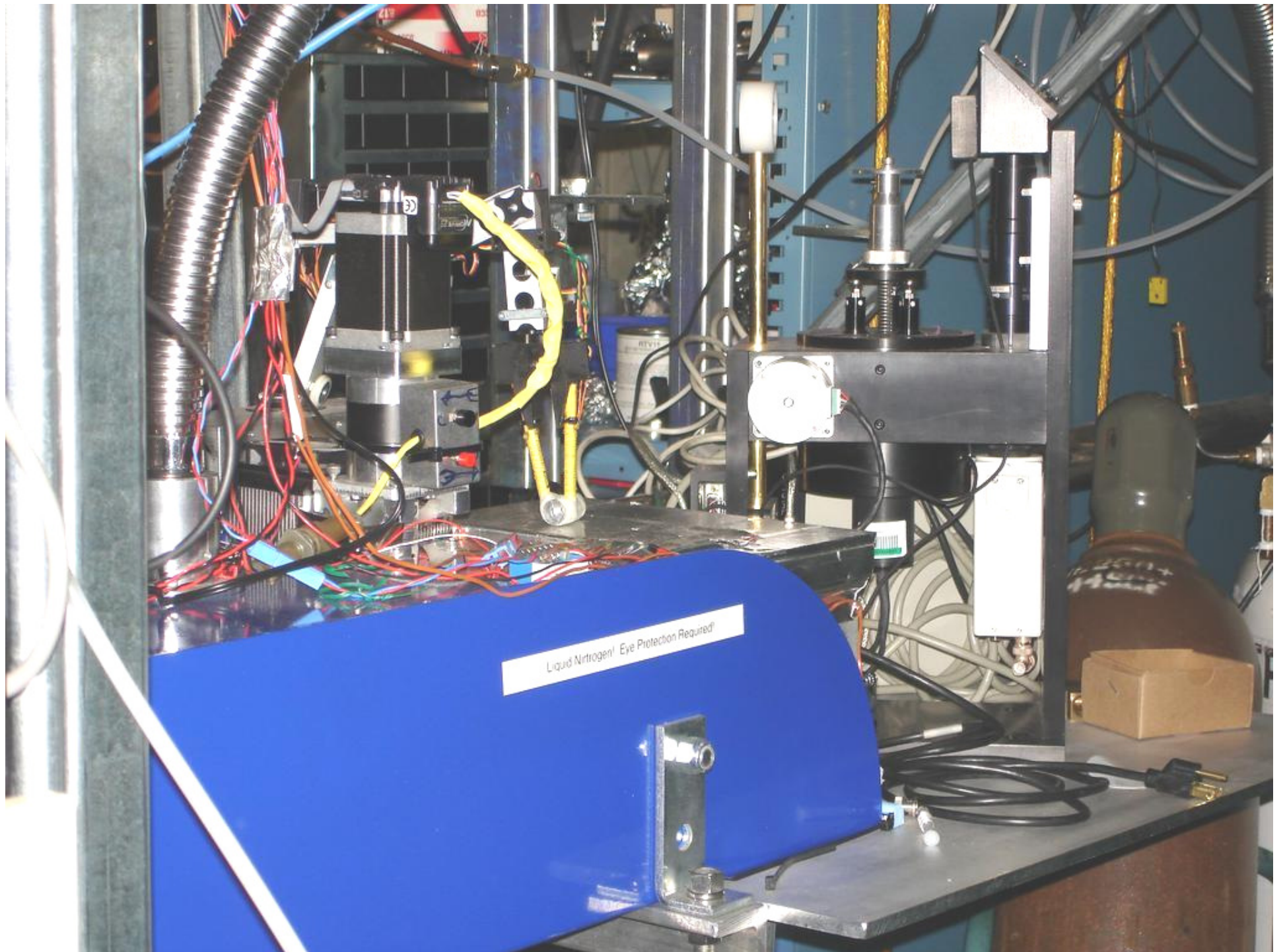


# Damage changes absorbance



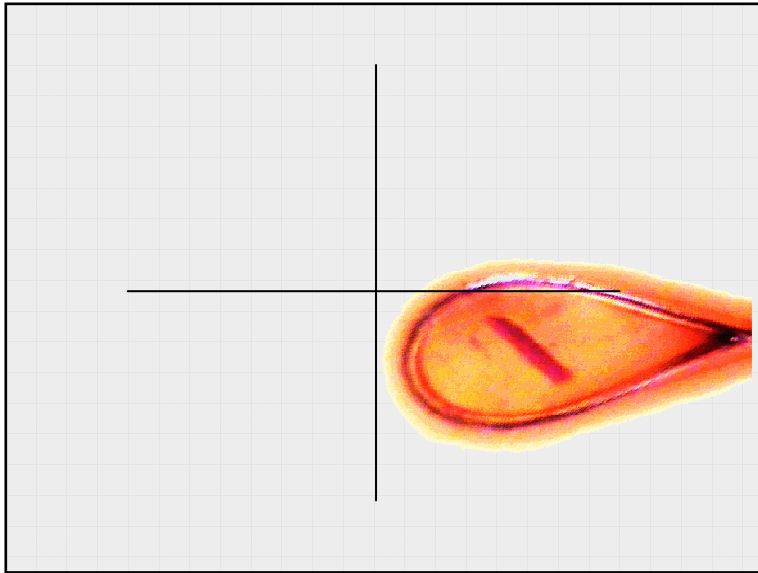




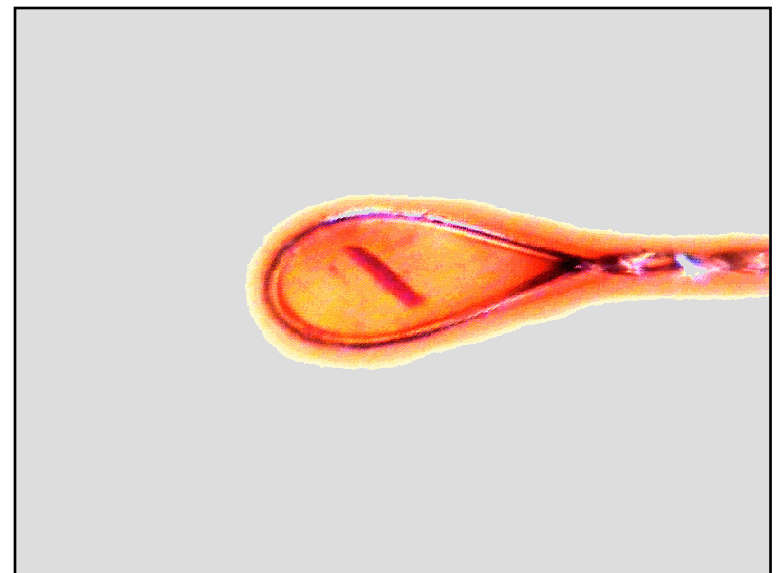




# Re-centering



beamline  
microscope



reference  
image

