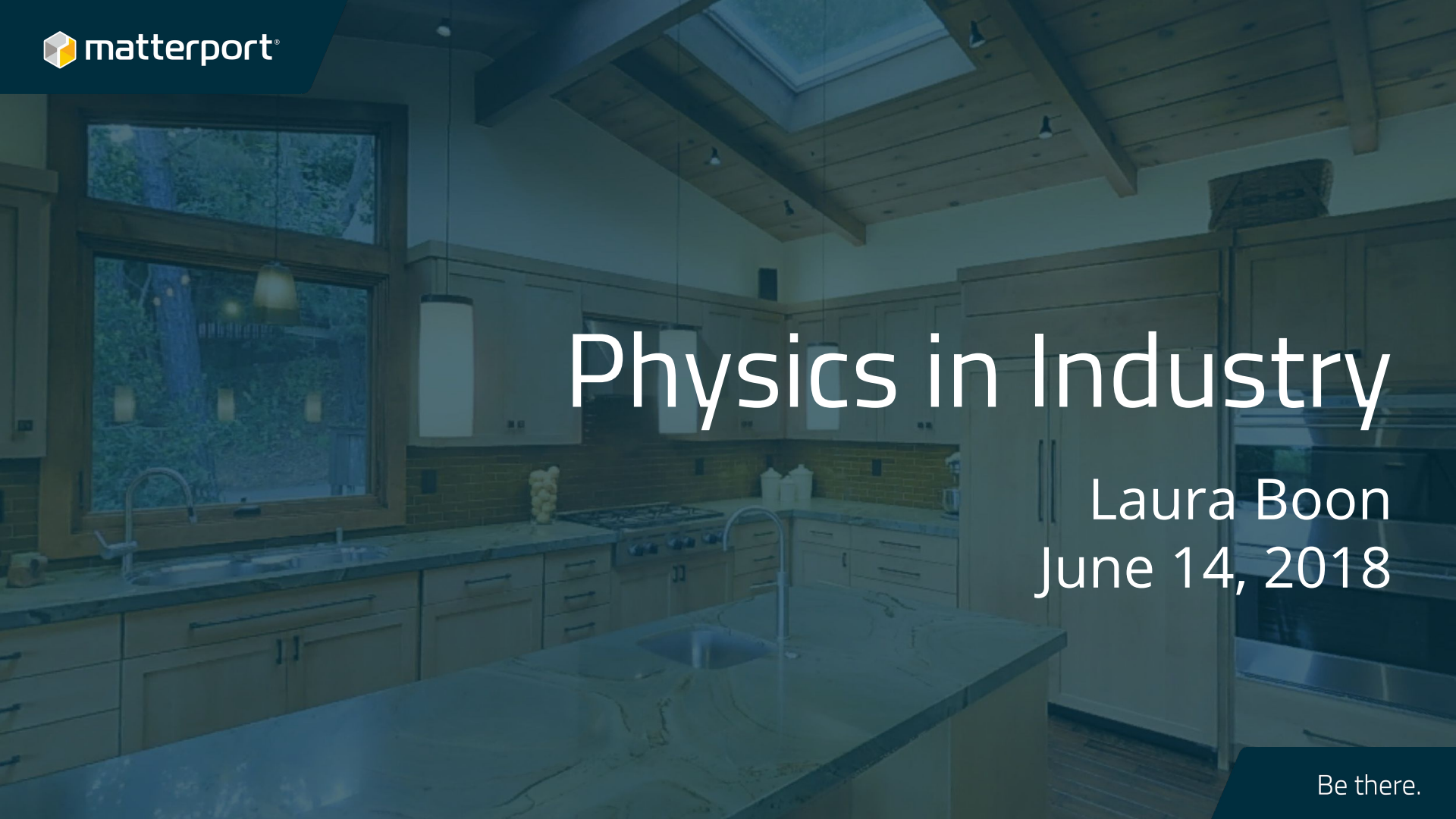

matterport
Physics in Industry
Laura Boon
June 14, 2018
Be there.

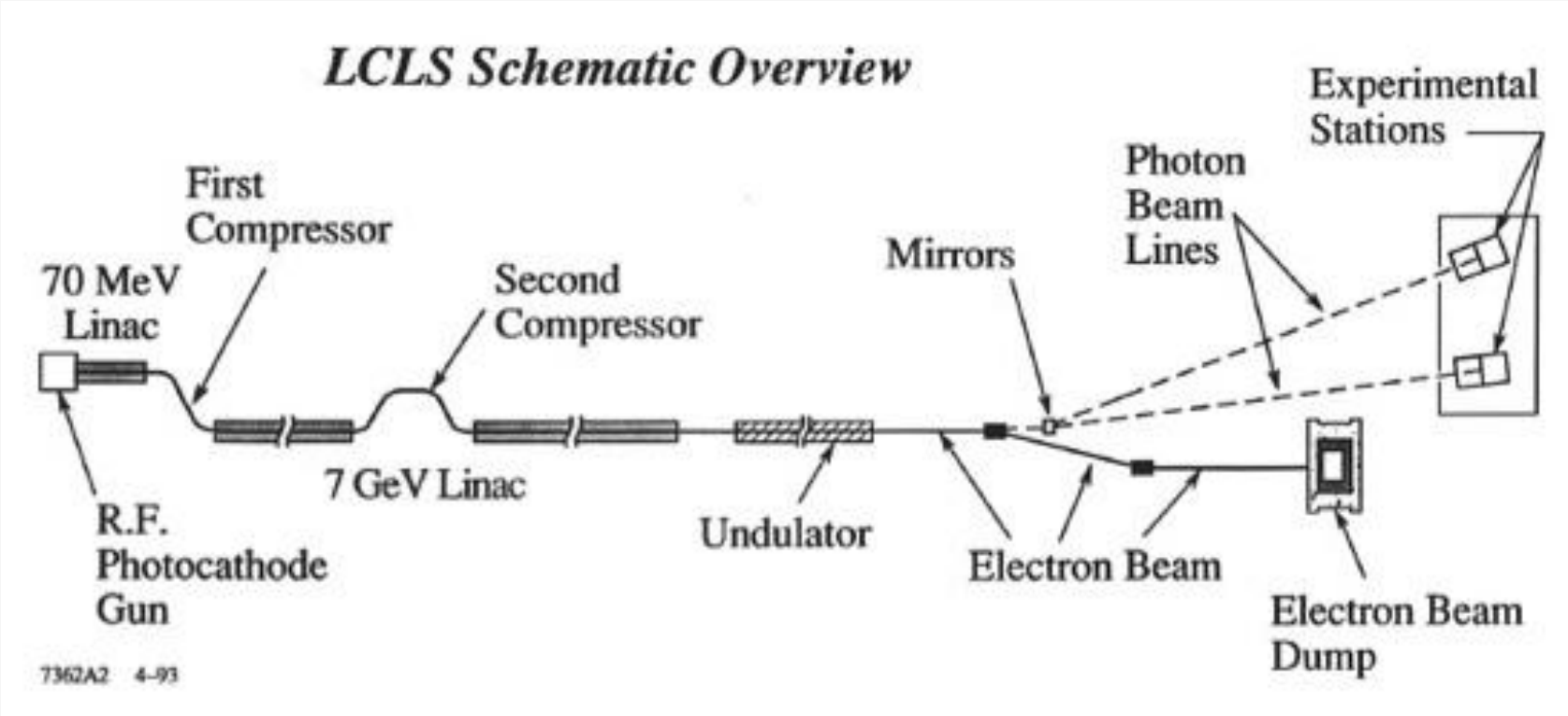
My Background

- Undergrad: Case Western Reserve University
- PhD: Purdue University, Accelerator Physics
  - Beam induced heat load on a superconducting undulator magnet
- Switch to Industry: Matterport, Optical Systems Engineer
  - Worked with structured light cameras, and RGB cameras.
  - Learned about the manufacturing process, testing Quality Assurance, Gauge R&R, etc.

Source: Advanced Photon Source Annual Report 2014

there.

Free Electron Laser



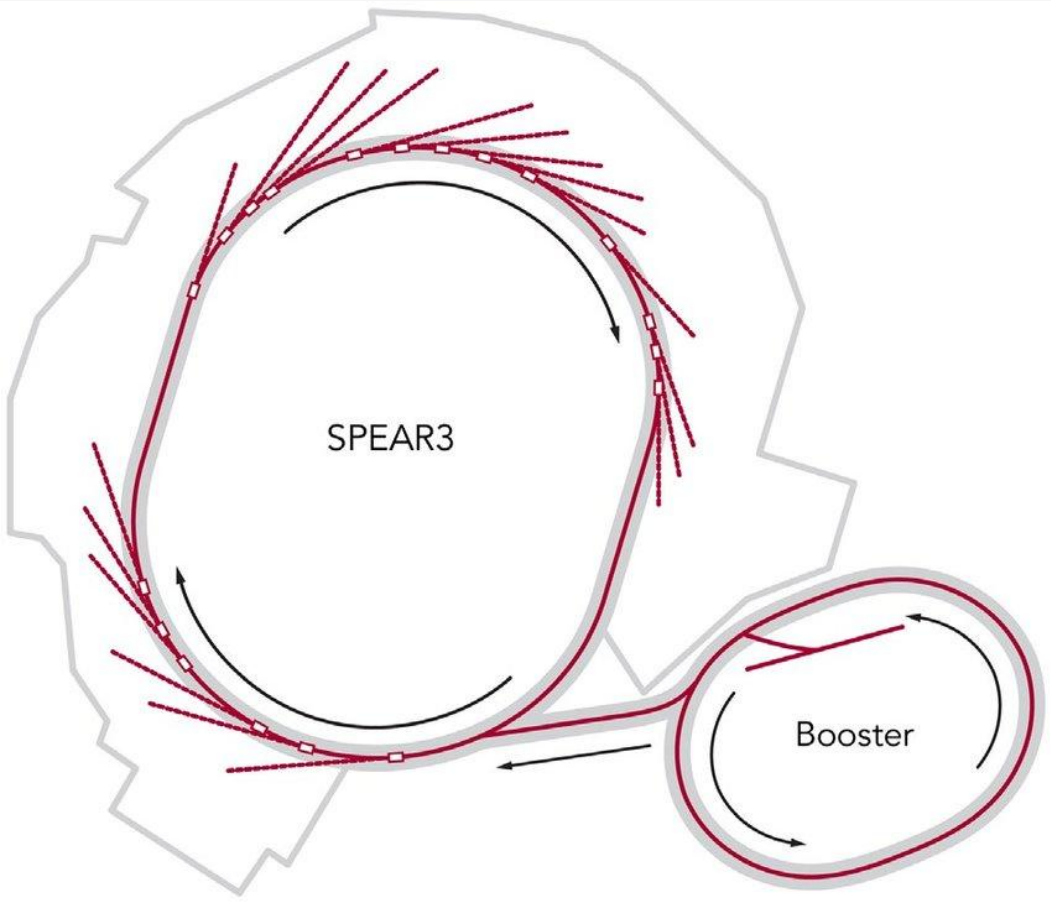
Source: [SLAC 20th Anniversary of a Great Idea]

3D Models of FEL sections

LCLS Undulator hall:
https://my.matterport.com/show/?m=YudBtDqUACB

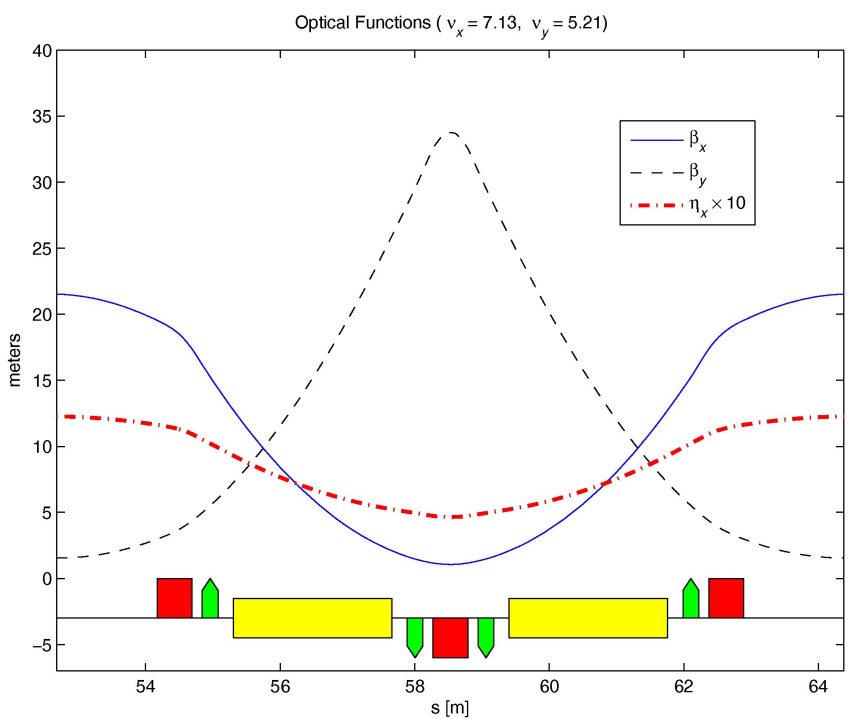
LCLS Near Experimental Hall:
https://my.matterport.com/show/?m=GrfGyzojZZP

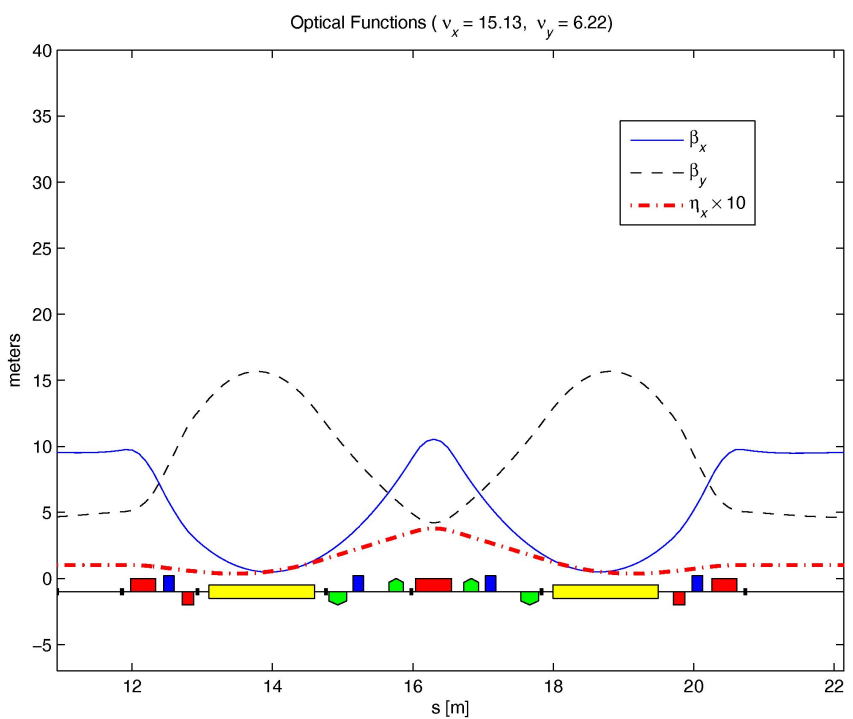
SPEAR 3 Layout



[The reinvention of the SLAC National Accelerator Laboratory, 1992–2012]

Envelope Calculations for SPEAR





3D Models of Storage Ring Light Sources

SPEAR3:
https://my.matterport.com/show/?m=P7yQkUGnNA2

ALS Dome: (Created by Matterport and ALS)
https://my.matterport.com/models/3pe8EVgERSj

ALS Tunnel: (Created by ALS intern Sam Schickler)
https://als.lbl.gov/about/3d-models-virtual-reality/