



國家同步輻射研究中心  
*National Synchrotron Radiation Research Center*

# Detector Status at Taiwan Photon Source

Yu-Shan Huang

Taiwan Photon Source  
National Synchrotron Radiation Research Center  
Taiwan

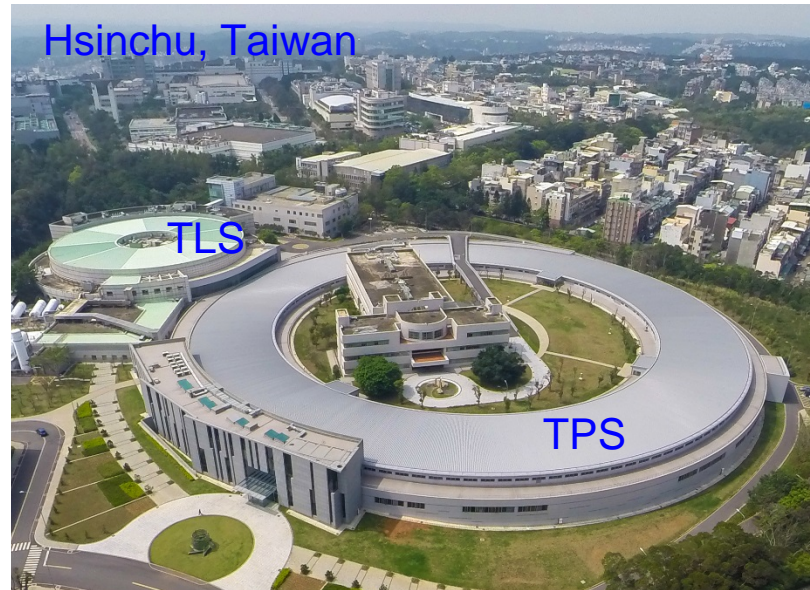


# Experimental facilities of NSRRC

**SIKA at ANSTO**



**TPS**  
(17 beamlines)



**TLS**  
(20 beamlines)

**2 Taiwan  
Beamlines  
at SPring-8**

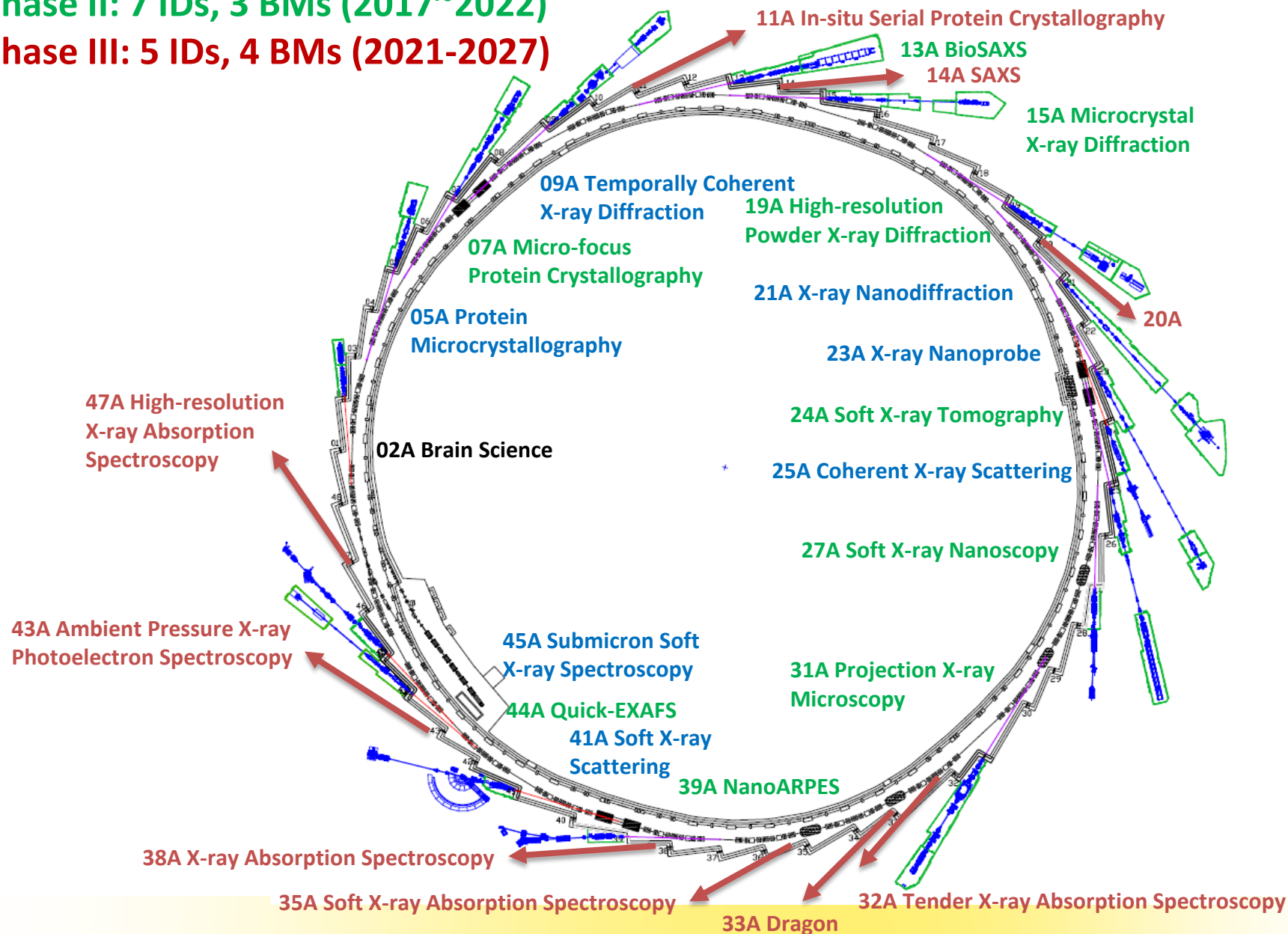


# TPS beamlines

Phase I: 7 IDs (2016)

Phase II: 7 IDs, 3 BMs (2017~2022)

Phase III: 5 IDs, 4 BMs (2021-2027)



# Current Detectors

- Detectors for X-ray imaging, diffraction, and scattering beamlines:
  - Si Pilatus 6M, Eiger 16M x 2, Eiger 9M x 2
  - CdTe Eiger 9M, 2M-W for X-ray > 20 keV
  - Strip detector Mythen 18k for powder X-ray diffraction beamlines
- Indirect CMOS camera for high energy/frame rate imaging beamline
  - Memrecam 50k-1M fps, Zyla sCMOS 100 fps
- Energy resolution detectors for spectroscopy beamlines
  - Maia-384 (collaboration: BNL, CSIRO, and NSRRC)
  - SDD Rayspec 7 sensor circular focused array
- **Projects under development:**
  - Indirect CMOS strip detector for X-ray imaging (Flash talk, session 8)
  - Indirect CMOS area detector for X-ray imaging and diffraction
  - EMCCD + Andor camera for soft X-ray scattering and imaging



*Thank you for your attention.*

1.5 GeV  
Taiwan Light Source

3 GeV  
Taiwan Photon Source

TLS BL: 20

TPS BL : 16+1+9

Taiwan BL @ SP8: 2