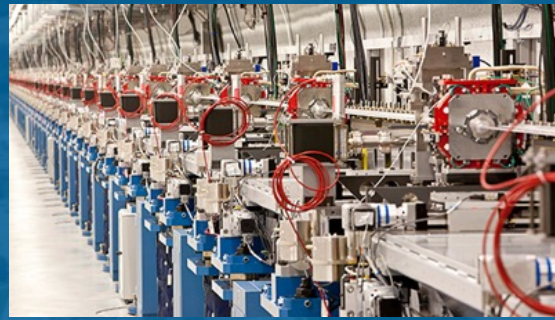


1 NOVEMBER 2018



BES LIGHTS SOURCES BEAM STABILITY WORKSHOP



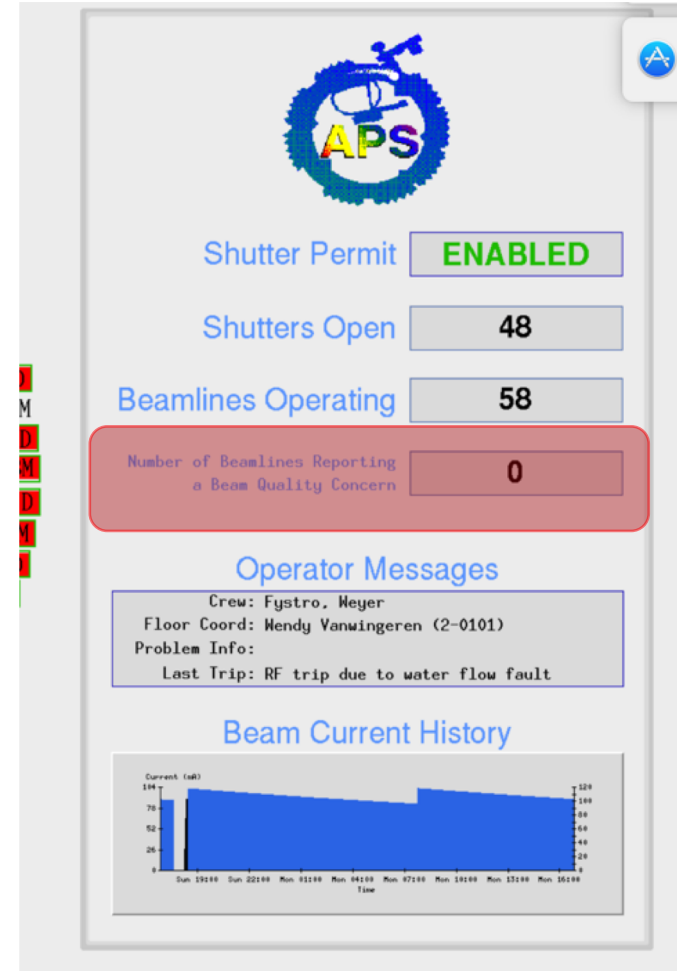
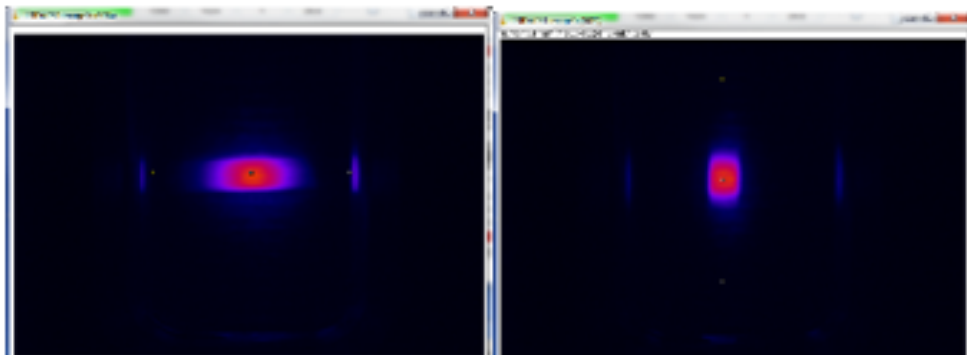
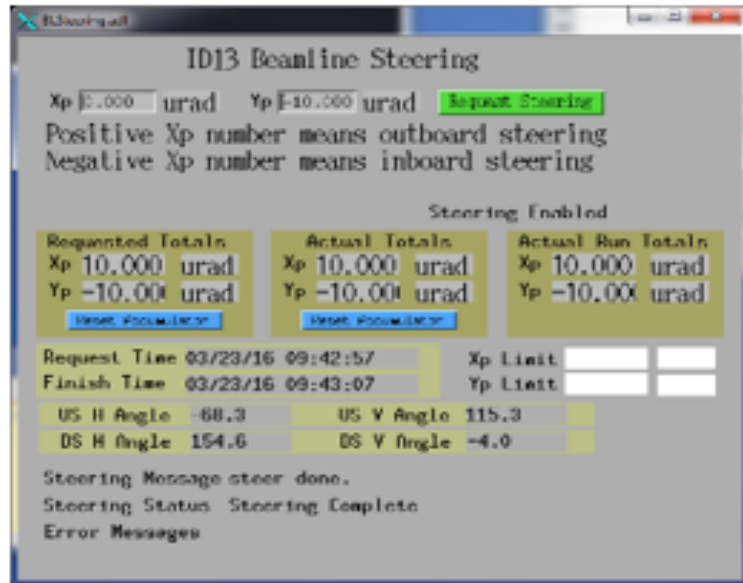
**GEORGE SRAJER
ON BEHALF OF THE BEAM STABILITY
WORKING GROUP ORGANIZING COMMITTEE**

WORKSHOP GOALS

- Bring together engineers, accelerator and beamline scientists to discuss most vexing beam stability challenges in their respective facilities
- The agenda was carefully developed to encompass both electron and photon stability issues including environmental contributions such as temperature drifts, vibrations, etc.
- Future will require an integrated approach to electron and photon beams stability

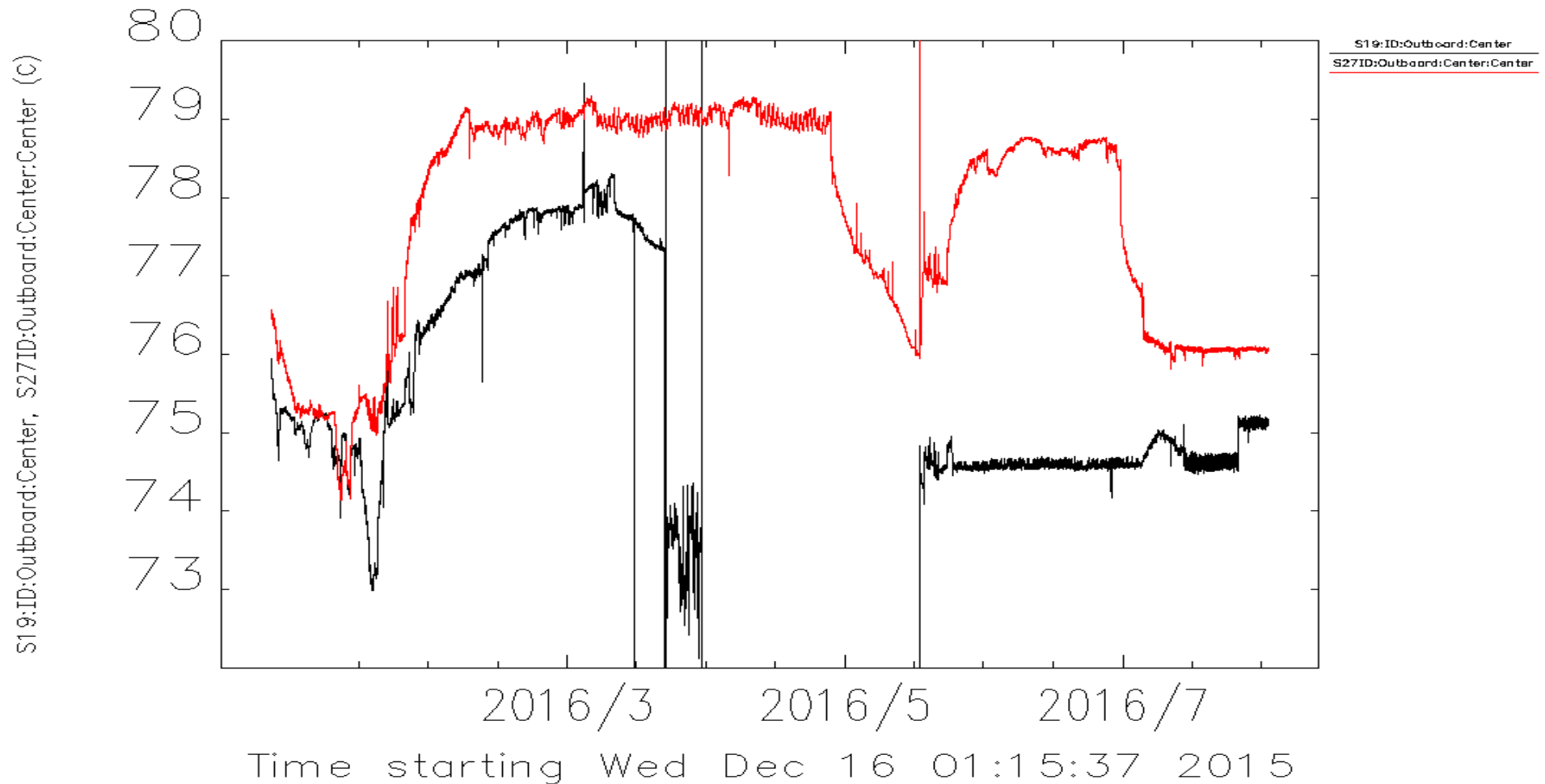
BACKGROUND

- There are many common challenges in the area of particle and x-ray beam stability
- Most facilities have embarked on addressing their specific issues
- APS established the Beam Stability Working Group on March 31, 2015
- Very positive interaction between accelerator and beamlines scientists



ANOTHER EXAMPLE FROM APS

- Tunnel temperature improvements
- Goal: ± 0.1 °F over 1 week already met APS Upgrade requirements



BEAM STABILITY WORKSHOP: HOW WE GOT HERE

- Inaugural conference call held on March 16
 - Topics, goals and organizing committee skeleton discussed
 - Communications continued via e-mail
- We presented a proposal for a Workshop to Directors of BES Light Sources at the 5-Way Meeting held at Berkeley Lab on April 23
- Facility Directors endorsed the Workshop
- We went to work!

BEAM STABILITY WORKSHOP COMMITTEES

Organizing Committee:

Axel Brachmann	LCLS
John Byrd	APS
Xiaobiao Huang	SSRL
Bryce Jacobson	LCLS
Simon Morton	ALS
James Safranek	SSRL
Fernando Sannibale	ALS
John Schmerge	LCLS
Timur Shaftan	NSLS-II
George Srajer	APS, Chair
Paul Zschack	NSLS-II

BEAM STABILITY WORKSHOP COMMITTEES

Program Committee:

John Byrd (co-Chair)

George Srajer (co-Chair)

Fernando Sannibale (ALS)

John Gosman (NSLS-II)

Xiaobiao Huang (SSRL)

Axel Brachmann (LCLS)

Logistics:

Candy Lao (LBNL)

Tracy Thomas (ANL)