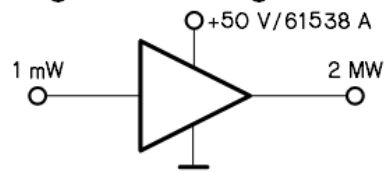


Twelfth Continuous Wave and High Average Power RF Workshop



12.-14.9.2022

CERN

Geneva, Switzerland

<http://cern.ch/CWRF22>

Contribution ID: 38

Type: **Oral presentation 20' + 5'**

The Plans and Status of the ALS-U RF Systems

Monday 12 September 2022 10:20 (25 minutes)

The Advanced Light Source (ALS) is in the midst of and upgrade, ALS-U, an upgrade which will replace the existing triple-bend achromat storage ring with a stronger focusing nine-bend achromat storage ring. The new storage ring's small emittance and reduced dynamic aperture requires a new injection scheme. ALS-U has chosen an on-axis swap-out injection to exchange bunch trains between the storage ring and new low-emittance, full-energy accumulator ring. To meet the requirements for these two new rings, the 500 MHz storage ring RF system will be upgraded with a new cavity power coupler to meet the new beam loading conditions and will receive new passive 3rd harmonic cavity systems while a completely new 500 MHz accumulator ring RF system, will be designed and installed using solid state amplifiers (SSA) and HOM damped commercially available normal conducting cavities. In this presentation, the details of the new systems will be described and the installation and commissioning plans given.

Authors: Mr NETT, David (LBNL); BAPTISTE, Kenneth (LBNL); Mr BENDER, Kevin (LBNL); Mr GALT, Mark (LBNL); BASAK, Shree Subhasish (LBL)

Co-authors: FLUGSTAD, Benjamin (LBNL); DU, Qiang

Presenter: BAPTISTE, Kenneth (LBNL)

Session Classification: Facility status reports #1

Track Classification: Facility status reports