

From: Eugene Chudakov gen@jlab.org  
Subject: Request for the permit to run Hall D in spring 2019  
Date: 17 January 2019 at 10:06  
To: Patrizia Rossi rossi@jlab.org  
Cc: Lubomir Pentchev pentchev@jlab.org



Dear Patrizia,

I am asking for permission for beam operation in Hall D in the spring 2019 according to the accelerator schedule.

The updated safety documents (COO, ESAD, RSAD, and ERR) are available at: [https://halldweb.jlab.org/hdops/wiki/index.php/Training\\_and\\_Safety](https://halldweb.jlab.org/hdops/wiki/index.php/Training_and_Safety)

The run plan including the list of Run Coordinators is available at: [https://halldweb.jlab.org/wiki/index.php/Run\\_Coordination\\_Meetings:Spring2019\\_Run](https://halldweb.jlab.org/wiki/index.php/Run_Coordination_Meetings:Spring2019_Run)

The PDL for this run is Lubomir Pentchev.

The spring run is scheduled for Jan 30 - Apr 7 (68 days in total). It will be split into 2 parts:

DIRC commissioning for GlueX-II (2 weeks) and PRIMEX-eta running. The DIRC is not affecting the beam line. For the DIRC commissioning we are planning to use two diamond radiators (already used in Sept-Oct 2018). We will also use amorphous radiators. The beam current will be adjusted depending on the radiator's RL, in order to provide the same photon flux.

- 1. GlueX-II E12-12-002 DIRC commissioning.** The objectives is to test and calibrate a 1/2 - the bottom part - of the DIRC detector. The DIRC upper optical box will not be installed. The regular GlueX-I conditions will be used, similar to 2018 September-October, plus the DIRC installed. The regular 30cm LH2 target will be used. Total 14 days. Maximum beam current: 1300nA (with a thin radiator).
  - 8 days: a) beam 100nA on a 0.039% RL diamond radiator. Alternative - b) 225nA on a 0.014% RL diamond radiator (providing a similar, but slightly lower photon flux).
  - 5 days: a) beam 500nA on a 0.039% RL diamond radiator. Alternative - b) 1200nA on a 0.014% RL diamond radiator.
  - 1 day: A test for the CPP E12-13-008 experiment will include installation of 1 RL and 2 RL lead shields 60x60cm<sup>2</sup> with the 12x12cm<sup>2</sup> hole for the beam in front of the TOF in order to measure the counting rates in the TOF detector. The regular photon flux will be used.
  - Comment: Aluminum radiators <0.05% RL may be used for a part of the run. The beam current will be scaled in order to provide a photon flux similar to the photon flux produced by the diamond radiators.
- 2. PRIMEX-eta E12-10-011.** Several items will be different from GlueX: a) The solenoid in Hall D will be turned off; b) the vacuum pipe downstream of the FCAL will be removed (similar to the last days of running in Dec 2018); c) only