



# Memo

Date: May 10, 2016  
To: Mark Breitfeller, Mohamed Benmerrouche, and Sushil Sharma  
From: Zhong Zhong (chair), Photon Science Radiation Safety Committee  
Subject: Review of the ray-tracing design of the BMM (6-BM) front-end

Dear Mark, Mo and Sushil,

The Photon Science Radiation Safety Committee (RSC)'s ray-tracing subcommittee concluded review of the front-end ray-tracing for the BMM (6-BM) beamline on May 5.

Subjects reviewed include the synchrotron max-fan and Bremsstrahlung drawings. Since the max. fan drawings are sufficient for assuring the safety of the front-end against synchrotron radiation, the interlocked synchrotron ray-tracings, included in the drawing packages, were not reviewed by the RSC.

## Written documents

The following documents were submitted to the RSC on April 18, 2017 for review:

1. BMM front-end assembly drawing, SR-FE-3PW-8001, Rev. C by J. Fabijanic.
2. BMM front-end Bremsstrahlung ray-tracing, SR-FE-3PW-8001, Rev. C, sheets 6 and 7 for horizontal and vertical projections, respectively.
3. BMM front-end max. synchrotron ray-tracing, SR-FE-3PW-8001, Rev. C sheets 4 and 5 for horizontal and vertical projections, respectively.

## Conclusions

Based on our assessment of the ray-tracing drawings, the RSC finds the Bremsstrahlung and synchrotron shielding designs for the front-end of the BMM beamline meeting the NSLS-II shielding policy.

## **Radiation Safety Committee**

<i>Name</i>	<i>Expertise</i>	<i>Directorate</i>
Andrew Ackerman	Deputy ESH Manager	PS
Dana Beavis	Experimental Nuclear Particle Physics	NPP
Andi Barbour	Beam Line Physicist	PS
Mohamed Benmerrouche	Nuclear and Radiation Physics	PS
Scott Buda	Personnel Protective Systems	PS
Ray Fliller	Accelerator Physicist	PS
Wah-Keat Lee	Beam Line Physicist	PS
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Dana Beavis	Experimental Nuclear Particle Physics	NPP
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Andi Barbour	Beam Line Physicist	PS
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