



## **Review of the sPHENIX pixel vertex detector, MVTX**

July 19-20, 2018

Charge to the review committee

The purpose of the review is to evaluate the maturity of the design of the sPHENIX pixel detector, MVTX, and the readiness for procurement of the Staves and Readout Units.

In carrying out its charge, the review committee is requested to evaluate the following specific items:

1. Does the current design demonstrate that the MVTX Staves and Readout Units will be compliant with its specifications?
2. Can the data from MVTX staves be extracted, readout and integrated into sPHENIX Data Acquisition System?
3. Are the electrical interfaces of the Staves and Readout Units to other sPHENIX components at a proper level of understanding?
4. Has the responsibility for fabrication, tests and acceptance for the Staves and Readout Units been defined?
5. Has a QA plan and acceptance tests for the Staves and Readout Units been clearly defined and documented?
6. Has the inspection/test records archive plan been clearly defined and is the information easily accessible?
7. Is the design of the Staves and Readout Units final?
8. Are the Staves and Readout Units ready for procurement?

The review committee is also requested to evaluate the following specific items concerning the maturity of the design and its integration within sPHENIX:

9. Status of the simulation to optimize the MVTX and INTT for tracking in sPHENIX and timescale for its completion
10. Status of the mechanical integration between the MVTX, INTT and other sPHENIX components and timescale for a final design

Reviewers may additionally, at their discretion, comment on any other notable issues and/or concerns which they identify.

A report from the committee is expected to be submitted to me by July 27, 2018.

I very much appreciate your willingness to lend your time and expertise in this important process and look forward to receiving your assessment.

A handwritten signature in black ink, appearing to read "Berndt Mueller".

Berndt Mueller  
Associate Laboratory Director for Nuclear and Particle Physics  
Brookhaven National Laboratory