

# EOI – EIC Silicon Consortium



**Please indicate the name of the contact person for this submission:**

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**Please indicate all institutions collectively involved in this submission of interest:**

LBNL, BNL Instrumentation Division, University of Birmingham, Rutherford Appleton Laboratory, CCNU (Wuhan), JLAB.

We expect others to be joining soon.

**Please indicate the items of interest for potential equipment cooperation:**

The goal of this consortium is to develop a MAPS sensor and associated powering, support structures, control and ancillary parts as necessary to produce a detector solution for silicon tracking for the central tracking parts of an EIC detector. The consensus of opinion in the consortium is that the optimum path to realize this goal is to join the ITS3 effort at CERN and work to develop both the proposed ITS3 sensor technology that could be used for the vertexing layers at the EIC, and a very similar sensor optimized for deployment in the outer barrel and disc layers.

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## **Opportunities for engagement of other groups**

The opportunities for collaboration with other groups are numerous given the wide scope of the proposed consortium efforts. We are currently discussing the way forward with INFN, ORNL and many other groups that have shown interest.

## **Additional information you think may be useful for the community to know about your expression of interest.**

Any group that has interest and ways to contribute are welcome. There are numerous presentations describing our intentions:

Initial proposal at EICUG YR meeting at MIT:

<https://www.jlab.org/indico/event/348/session/5/material/0/0.pdf>

Description of ITS3 R&D project at EICUG YR meeting at Temple:

[https://indico.bnl.gov/event/7449/contributions/35955/attachments/27131/41358/2020\\_03\\_18\\_EIC\\_ITS3\\_tech.pdf](https://indico.bnl.gov/event/7449/contributions/35955/attachments/27131/41358/2020_03_18_EIC_ITS3_tech.pdf)

ERD-25 proposal talk:

<https://wiki.bnl.gov/conferences/images/1/1c/ERD25-proposal-Jul20.pdf>

Please contact me if you have interest.