ePIC Management Statement and Plan (BARISH/JACAK)

It is an honor to be considered as the initial spokesperson team for the ePIC collaboration. The opportunity to address some of the most compelling questions in nuclear physics, such as "how do nucleons emerge from quarks, gluons and their interactions?" and "how do partons interact inside cold dense QCD matter?" motivate us to collaborate, while the challenges of building a state-of-the-art detector bring us together.

The prime focus of the next two years is the successful progression through the CD-2/3/3A process, including producing a technical design report (TDR) and preparing for the review. The TDR will need to present a design that fits inside the budget and meets the key performance parameters. This will require demonstrating the performance at a very quantitative level. Additionally, we must show that we have the collaboration strength and organization to pull it off. These goals inform the management structure that we propose for the design phase of the collaboration, where an analysis/simulation coordinator and a detector/technical council that integrate the collaboration and project at the ground level are key features.

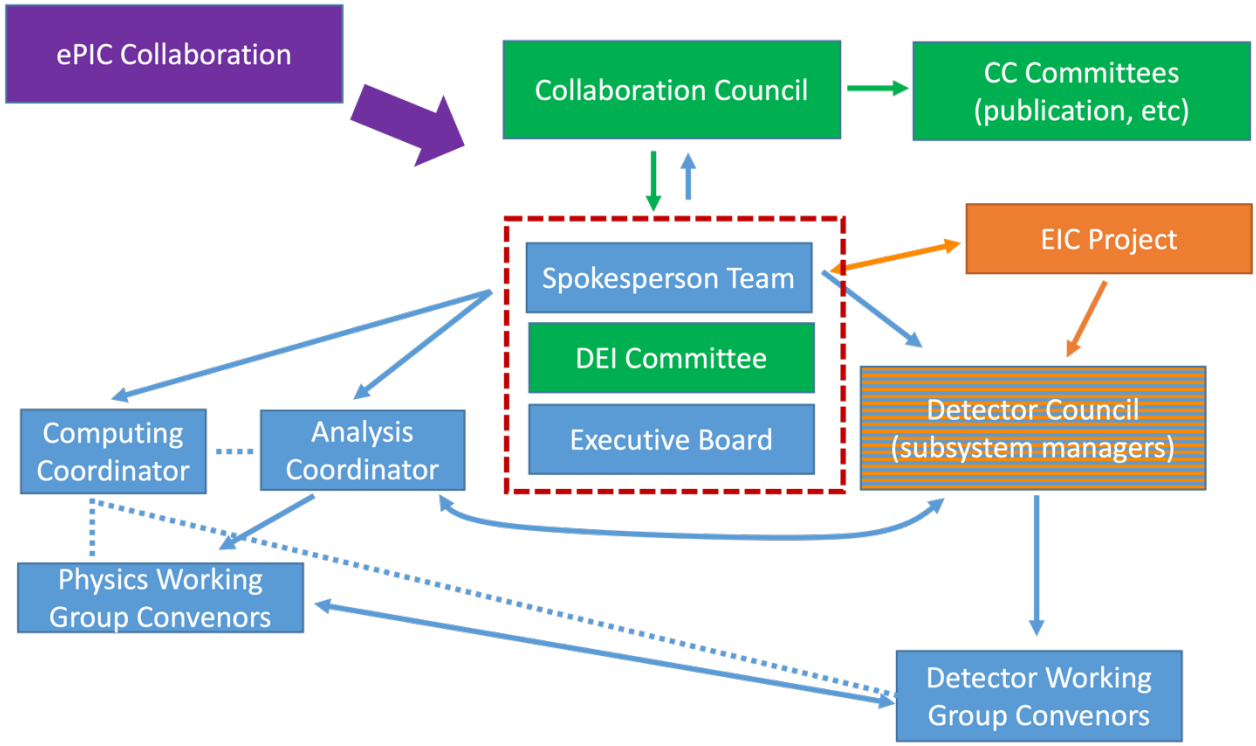
Our leadership team welcomes the opportunity to foster a welcoming, inclusive, and transparent environment and with sufficient strength to realize the project. Building this strength includes identifying institutes worldwide with potential interest in the EIC and actively recruiting new member groups. Our scientific outreach to expand the collaboration membership and science will include: the active engagement of the heavy ion community through their interest in many-body QCD, which is complex, interesting, and not understood; and the evaluation of targeted measurements interesting to low-energy QCD physicists and the high-energy physics community (EIC in Snowmass 2021).

Leadership Team: Ken Barish will serve as spokesperson and Barbara Jacak as one of two deputy spokespeople. We feel that the combination of Ken's background in cold QCD through polarized proton and proton-ion collisions at BNL and Barbara's background in heavy-ion physics and experience in leading the PHENIX experiment form the foundation of a complimentary leadership team. The remainder of the team, including the second deputy spokesperson, will be built through a deliberative and consultative process with consideration of the complementarity of our scientific expertise, experience, skill sets, communities, and geography. The team will establish a presence at BNL and anticipate regular visits to JLab.

Ken has completed his term as department chair and is free of administrative and committee commitments. Additionally, his term as a deputy spokesperson for the STAR experiment ends in a couple of months. He is on sabbatical during the winter of 2023, and the department chair is supportive of finding a solution for full teaching relief while being the spokesperson. Aside from continuing to mentor his postdocs and graduate students working on STAR physics analysis, Ken's full attention will be on ePIC.

Barbara has completed her service as Division Director of LBNL's Nuclear Science Division. She has a joint appointment at UC Berkeley and LBNL, meaning that she teaches every other semester. She has earned a sabbatical leave, and would take that in order to devote her attention to ePIC. She will continue to mentor her postdocs and students, who work on both EIC and ALICE.

Proposed Organization: We would build out the structure that is described in the collaboration charter while tailoring the organization for the design phase of the experiment. A block diagram of the structure is given below, followed by a description of each element.



ePIC Collaboration: Management's primary responsibility is to serve and represent the collaboration. We encourage collaboration members to reach out to the leadership at any time and welcome any and all formal and informal input. We envision regular office hours, availability by chat, zoom in person, etc.

Collaboration Council (CC): The management team serves at the pleasure of the CC; we welcome regular formal and informal consultation and will report regularly to the CC and the collaboration. The CC chair and vice chair are the day-to-day contact point with management. We will work closely with the DEI committee, which will be consulted as the full management team is formed, will proactively work to continually improve the climate of the collaboration, and will be responsive to all concerns raised. Management will also provide feedback to the CC as any collaboration issues arise.

Executive Board (EB): As the EB is the central advisor to the Spokesperson's team on physics policy, instrumentation choices and candidate suggestions for leadership positions, the first order of business will be to form Executive Board. Beyond the at-large members, DEI and early career representatives that are selected by the Collaboration Council, the Detector/technical coordinator, Analysis/simulation Coordinator, and Computing Coordinator is proposed to complete the EB during the design phase of the experiment. The chair of the CC will be invited to participate as an ex-officio member. The Executive Board will be convened monthly, with more frequent interactions as needed.

Detector Council (DC): We will create a Detector/Technical Council (DC) to oversee detector integration and development, which would operate closely with the Spokesperson team and collaborate at the ground level with the project. The coupling of a project manager with the physics

lead for each detector system is proposed, but since there may be variations from sub-system to sub-system, the responsibilities, and structures of the DC will be discussed with the project and finalized in consultation with the CC and collaboration. A technical coordinator is anticipated, but the scope of their responsibilities will be decided as the management team is formed, working closely with the project and collaboration. The detector working groups (DWGs) fit within the structure of DC. The Analysis/Simulation Coordinator will participate in the detector council meetings to foster horizontal integration.

Analysis/Simulation Coordinator (AC): We will propose to the CC the appointment of an analysis/simulation coordinator. This position is central to ensuring that physics performance is well understood and is a key driver in design decisions. Detector and physics working group task forces that involve multiple physics and detector working groups to build the necessary tools, such as the electron finder, kinematic reconstruction, etc. are envisioned. The AC will coordinate these efforts, sit on the Detector Council, and oversee the physics and software working groups.

Computing Coordinator: We will propose to the CC the appointment of a computing coordinator, who will work closely with the AC and have close links with the PWGs and DWGs. The Computing Coordinator will sit on the EB.

Horizontal Integration: The proposed structure and interconnectivity together with a strong leadership team are designed to foster horizontal integration.

ePIC Weeks (with remote option): In addition to bi-annual full collaboration meetings and, we propose to have ePIC weeks at BNL and/or JLab, ultimately on a monthly basis, but starting every other month. These would include Executive Board, Analysis and Detector Council meetings in addition to PWG and DWG meetings.

Grant Support Team: In the early years of the collaboration, obtaining funding to enable the growth of the project will be of paramount importance – ePIC's success requires the time and effort of the collaborators. Therefore, we propose establishing a Grant Support Team with a range of members who have experience in obtaining funding from different funding bodies in a variety of countries. Their role would be to advise and provide feedback, as needed, on grant application drafts to maximize the chances of success. This may be of particular benefit in helping to establish early career scientists and ensure a strong and capable collaboration for the realization of ePIC.

Roles and Responsibilities: Ken will consult with Barbara and the second deputy in partnership and the Executive Board and the collaboration before making final decisions. Ken will be the primary contact for the project and other collaborations. Barbara will participate in the management of the collaboration and take on specific responsibilities as required. Other tasks would be split as needed, depending on expertise and availability.

Biographies of Spokesperson Candidate Team (Barish/Jacak/TBA)

KENNETH N. BARISH earned his B.A. in Physics at the University of California, Santa Cruz, in 1989, where he graduated with honors. The subject of his senior thesis was a simulation of the 3D-Ising model on a novel computer architecture, the Hypercube. He worked on the L3 experiment in the offline software group for five months before starting graduate school. He earned his Ph.D. in Physics in 1996 from Yale University with Jack Sandweiss on a search for Strange Quark Matter in Heavy-ion Collisions (E864) at Brookhaven National Lab. After working with Huan Huang as a postdoctoral fellow at the University of California, Los Angeles, Ken joined the faculty at the University of California, Riverside (UCR) in 1998 and has been a full professor since 2008. He served as chair of the Department of Physics and Astronomy from 2016 to 2022, where he grew the faculty from 33 to 45 faculty. He has also served as chair of UCR's academic senate Committee on Planning and Budget and as on member of the UC systemwide Committee on Planning and Budget for three years. He initiated the spin physics program at UCR when he proposed and implemented a central-arm trigger, which he co-led, that facilitated much of the PHENIX spin physics program and served as the convenor of the PHENIX spin physics working group. He was also a PI for the PHENIX muon trigger upgrade. Ken's group has since moved to the STAR collaboration. His group made significant contributions to the FMS post-shower detector and currently focusing on the STAR forward upgrade program. He is presently serving as deputy spokesperson of the STAR collaboration, with his term ending in a couple of months. Ken served as a convenor of the EICUG Yellow-Report Detector Working Group, succeeded in the allocation and recruitment of a new tenure-track faculty (Miguel Arratia), in collaboration with Jefferson Lab, with the EIC as the primary motivating factor, and served on the ATHENA charter committee.

BARBARA V. JACAK received her Ph.D. from Michigan State University in 1984. She was then an Oppenheimer Fellow at LANL 1984-1987, LANL staff member 1987-1996, Stony Brook University Professor of Physics 1997-2007, Distinguished Professor of Physics 2008-2014, UC Berkeley Professor of Physics 2015-present, Director of LBNL Nuclear Science Division 2015-2021. Her research focuses on production and characterization of quark gluon plasma in heavy ion collisions: HELIOS & NA44 at CERN SPS, PHENIX at RHIC (spokesperson 2007 to 2012), ALICE at the LHC. She is now excited about studying cold, dense matter in e+A collisions. She contributed to the EIC Yellow Report, served as a member of the EICUG Steering Committee, and the ATHENA Executive Board. She leads the California EIC Consortium. Committees: NAS Board on Physics and Astronomy, 2014-2018 (chair 2016 -2018), NSAC 1995-1996, NSAC Long Range Plan working group in 1995, 2001, 2007, 2023, EICUG and ePIC Charter Committees. Societies: Fellow of the American Physical Society and of the American Association for the Advancement of Science, member of the National Academy of Sciences, American Academy of Arts and Sciences, and the American Philosophical Society. Prizes: APS Tom W. Bonner Prize 2019, DOE Distinguished Scientist Fellows Award 2019.