Biographies of Spokesperson Candidate Team (Barish/Sokhan)

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 is completing his term, which began in 2016, as Chair of the Department of Physics and Astronomy. 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. 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.

DARIA SOKHAN graduated from the University of Cambridge with a BA in Natural Sciences (Theoretical & Experimental Physics) in 2002. She obtained an MPhil. by Research in Nanotechnology at the University of Bath (2004) then after a year out of physics, she returned to obtain a Ph.D. in hadron spectroscopy from the University of Edinburgh (2009), under the direction of Dan Watts. Her thesis, on a measurement using CLAS, was awarded the Jefferson Lab (JLab) Thesis Prize. Straight after, she began an INFN Fellowship for Foreign Scientists at Pavia, Italy, working on experiments at the Mainz Microtron in Germany. From 2010 - 2012 she was a CNRS postdoctoral researcher at IPN-Orsay in France, studying hadron structure through exclusive measurements on the neutron with CLAS and CLAS12 at JLab, where she is co-spokesperson of two experiments, and had a leading role in the development of a new neutron detector. Since 2013, Daria has been tenured at the University of Glasgow (lecturer, then senior lecturer), where she has continued her hadron structure work with JLab, focusing on Generalized Parton Distributions, and started her involvement with the EIC. Daria is currently on a two-year sabbatical leave – in 2021 she was awarded the Blaise Pascal Chair by the Ile-de-France, which she has taken up at CEA Saclay in France. Since 2016, after initiating and organizing the first UK EIC workshop, Daria has been leading efforts to increase country-wide interest in the project, both with research groups and with funding agencies -- as a result she co-led two successful EIC grant applications in the UK and is co-PI of an EIC work package in the STRONG-2020 Horizon 2020 grant. She was co-convener of the Exclusive Processes working group for the Yellow Report, is current co-convener of the Exclusive Processes & Tagging working group for the ATHENA collaboration, served on the ATHENA and EICUG charter committees and was elected the EICUG European Representative in 2021.

Management Statement and Plans (Barish/Sokhan)

Vision and Complementarity: It is an honor to be considered as the spokesperson team to lead the initial phase of the ATHENA experiment. We strongly see the realization of ATHENA as essential to maximizing the physics output of the EIC with its forward-looking approach. One of ATHENA's key strengths is its large-bore magnet with a variable field strength: considering possible upgrade paths right from the start will lead to unique scientific opportunities at the EIC. Our initial focus will be the successful and timely completion and defense of the detector proposal. We will fully support the current effort, maintaining the established structure of working groups and seeking additional people as required. Over the next few years, primary goals include gaining approval of a proposal that highlights the strengths of the ATHENA concept, transitioning from a proto-collaboration to a fully functioning collaboration built with 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. The development and promotion of early career scientists, in particular, is crucial to the success of the collaboration and the project at large.

We are running as a team due to the complementarity of our scientific expertise, experience, skill sets, communities, and geography. We feel that the combination of Ken's background in cold QCD through polarized proton and proton-ion collisions at BNL and Daria's in the study of nucleon structure through electron scattering at JLab provides a balanced representation of the ATHENA scientific community. While Ken is based in the US and already has leadership in the BNL experimental program, Daria bridges France and the UK in Europe and has long experience in a US lab. Both Ken and Daria had leadership in the EIC Yellow Report effort as co-conveners in the overall Detector and Exclusive Processes working groups, respectively. Daria is presently co-convener of the ATHENA Exclusive & Tagging WG. The success of EIC rests equally on the development of physics in the coming years, and we believe we can bring together our complementary scientific communities to achieve the full potential that ATHENA has to offer. This includes facilitating the involvement of theorists, whose contribution is indispensable for realizing the physics program.

If elected, Ken will step down as chair of Physics & Astronomy at UCR, and Daria, who is currently on a two-year sabbatical leave, will focus on the approval and realization of ATHENA. Either can be at BNL any time (as COVID travel restrictions allow) and will be as needed and to establish a presence.

The steering committee has already formed an effective structure to put ATHENA on the path of approval. We do not foresee making changes in the basic elements, including the proposal, integration, and working groups at this time. We would complete the structure that is detailed in the charter and policy documents, including an official consultative decision-making process. This includes initiating the formation of the Executive Board, Conference Committee, and Editorial Board. We also propose forming a Detector Council, a Climate and Inclusivity Committee, a Grant Support Team, and a Collaboration Transition Group. As per the ATHENA governing documents, these groups and memberships would be proposed to the IB for approval. Input from collaborators, both formally through the IB and informally from individuals during meetings and over email, will be crucial for the healthy functioning of the collaboration -- we will ensure effective two-way communication and an open ear.

Executive Board: The first order of business will be to propose an initial Executive Board to the Institutional Board. It is foreseen that the steering committee will largely form the core, with any

missing elements added, such as an early career scientist and a member of the Detector Council. The board would likely evolve with the phases of the project to include needed expertise, including after approval.

Collaboration Transition Group: There could be a significant influx of collaborators from other proposal collaborations and changes requested to the design of ATHENA, depending on the outcome of the proposal review. It will be crucial to be welcoming, integrate any new members into the collaboration positively, and address any required changes in a manner that optimizes the success of the project and the collaboration as a whole. A group, in addition to the spokesperson team, would help in the transitional period, seeking also to grow the collaboration with active recruitment of new groups worldwide.

Detector Council: During the transition period and with the help of the group above, we envisage the creation of a Detector Council to oversee detector development, which would operate closely with the Spokesperson team and have a representative on the Executive Board. We anticipate that this group would evolve from the current Integration Group and would integrate the sub-detector working groups within its structure.

Conference Committee and Editorial Board: While it will take some time before ATHENA data publications come into consideration, it will be crucial to publicize the collaboration, promote our collaborators and their work, and recruit new members right from the start, including reaching out to new institutions worldwide. As such, the work of a Conference Committee will be of the utmost importance in actively seeking opportunities to present ATHENA, securing invitations, and identifying the most appropriate people to give talks and colloquia, ensuring balance in the representation. We envisage a similar need for an Editorial Board, which, at the early stages, would seek to achieve the same goal by reviewing and promoting technical publications, conference proceedings, soliciting/supplying news articles for magazines such as the CERN Courier, and publicizing ATHENA to the general public, funding agencies, etc.

Climate and Inclusivity Committee: We believe the collaboration will be most successful if it has a strong collegial spirit and a culture of mutual support. While this needs to be ingrained in all committees and everything we do, we would like to form a Climate and Inclusivity Committee with at least two roles. Firstly, the committee would be a group that anyone in the collaboration should be comfortable approaching should they need help or have any issues (whether in the collaboration or with their home institution) if they are not comfortable going directly to the spokesperson or deputy. Additionally, the group would advise management on climate and inclusivity issues.

Grant Support Team: In the early years of the collaboration, obtaining funding to enable the growth of the project will be of paramount importance -- its success rests on 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 ATHENA.

Roles and Responsibilities: Ken will consult with Daria in partnership and the Executive Board and the collaboration before making final decisions. Ken will be the primary contact for the project, other collaborations, Asian and other non-European institutions (likely with assistance from others within the collaboration), and US funding agencies. Daria will be the primary contact for European institutions. Other tasks would be split as needed, depending on expertise.