Dear Colleagues,

**Citation: For sustained impact and cross-disciplinary breakthroughs in diverse phenomena of space-time travel, temporal paradox, and Exo-Biology.**

We are honored to nominate Dr. John Smith for the honor of Union Fellow of the Society. John and I both attended the Legion Academy in the 1970s, where John quickly distinguished himself from our peers through his ability to grasp the fundamentals of space-time travel and connect these basics to current open quesitons. Since our introduction, John and I have continued to collaborate and it has been a pleasure to see him succeed. In my nomination letter I will provide a broad overview of John’s sustained impact and breakthroughs, highlighting where the supporting letters, CV, and bibliography will provide more information.

John is one of the foremost contributors working towards establishing the link between Space-Time Travel and Exo-Biology in our era. Through his numerous cross-disciplinary collaborations, John has been able to show how his work has made important implications in the subfield Time Travel, as well as in other subfields such as Space travel. While his research is primarily theoretical, he has always emphasized the connection of basic physics with observations. John is amply deserving of the Society Fellowship on the basis of both the depth and breadth of his sustained contribution to Physics and the research interests of the Society Fellowship Committee. The results of his research have far-reaching implications in multiple disciplines and each of the submitted letters will reflect on these areas. The supporting letter by Dr. Emitt Brown will highlight their work on flux capacitors and their initial attempts at time (sans space) travel. Dr. Eleanor Arroway will then discuss their work on the necessary interconnectedness of space-time travel and the success of their experimental work. This will be followed by the letter from Dr. Jadzia Dax focusing on John’s encompassing enthusiasm to embrace new sciencific paradigms and collaborations, demonstrating how these qualities distinguish him as a role model for being a supportive collaborator and building a team to enable translational science and their work on exobiology and exo-archaeology.

John has an extensive publication record that is the product both of his scientific creativity and the care he takes to build and maintain collaborations. His collaboration with Dr. Emitt Brown resulted in a seminal series of papers, in which John revealed the physics of flux capacitors [see bibliography section Time-travel and specifically Brown and Smith 2020 reviews in dimensional paradox]. These are the essential building blocks of our understanding of such diverse phenomena as time travel [e.g., Smith et al 800], temporal paradox [e.g., Dax et al 3050], and ionized hydrogen and helium of interstellar origin [Parker and Smith 2018]. This work led to new collaborations with Dr. Arroway that incorporated the principles of his work on time travel into her theoretical construct of interstellar space travel [e.g., Smith and Arroway 2021 and in the bibliography under section Space-Time Travel]. Together, John Smith and Eleanor Arroway literally "wrote the book" on *The Physics of Space-Time Travel*, which has since become the essential textbook for graduate students everywhere (it has currently been translated into 10 different languages).  This work and John’s enthusiasm and continual curiosity led him to reach out to Dr. Dax to explore more fully the implication of the new fields that his work with Dr. Arroway had opened up [e.g., Smith, Arroway, and Dax 2000 and the Bibliography section Cross-Disciplinary work]. Perhaps one of the themes throughout John’s research is his love of learning, his continual interest in working with diverse colleagues who will challenge him, and his support of their many endeavors. John has shown a fearlessness to tackle any new area of research which his studies may lead him. Many of the ideas developed by John have implications that stretch from the state-of-the-art observations to deeper theoretical processes, bridging the experimental to theoretical communities, involving dozens of research groups and many authors [see CV section Collaborations and Service].

John has also made many other important contributions in fundamental physics of his research field. He is an internationally acknowledged authority on the physical properties of specific processes in his field [e.g. Smith, Bohr, and Who 1930 On the Constitution of time particles]. The breakthroughs he made in this area provide the science foundation for the revolutionary studies expected with a number of upcoming Big Missions [e.g., Bill and Ted’s Phone Booth]. Another scientific field that John has pioneered is the study of Exo-Archiology. He, along with his team on another Big Mission [Blue Box], performed the first measurements of its kind. These measurements opened up a whole new area of study and has spawned a host of investigations by the outside community. However, as important as these measurements are, their impact would have been trivial without John.  He developed the infrastructure at Pacific Tech to allow the entire research community to access the Blue Box and Phone Booth data.

John’s community contributions truly deserves recognition: John’s commitment to, and promotion of, diversity. John has always been highly proactive in establishing diversity in his research team. He advocates relentlessly for his collaborators and works tirelessly towards building an inclusive and safe environment for all to work in.  John is a role model in how to make sure to give credit where credit is due. While he is often one of the more recognizable names on papers, he routinely calls out the work done by his collaborators in his own presentations and (as noted by more than one conference convener) will re-direct credit for work mistakenly attributed to him by his peers to his collaborators when appropriate [See CV section Presentations – “How Using Team Science Ensured Safe Space-Time Travel” Plenary at the Fall AGU meeting 1920, and 2020].

Dr. Smith embodies the best ideals of the Society Fellowship: contributions to science with a broad impact and unparalleled, humble, and sustained scientific and community leadership. His research through his collaborations continues to elevate the Physics disciplines and influences and leads the international science community. He is an exceptional candidate for the Society Fellowship and embodies the qualities that the Society looks to uphold.

Sincerely,

Diana R. Who

Prof. D. R. Who, PhD