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Elevating Society by Transforming the Way We Do Physics

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We are living through an unprecedented transformation. We are amidst a global pandemic, national crisis on race, local injustices, and the compounding individual stress brought on by all of these forces. These events force us to turn inwards to evaluate what systems we uphold with our everyday actions. Importantly, we are asking questions about how we can make a change for the better. In this presentation, I will share my astrophysics journey through the University of Hawai'i-Mānoa, Fisk University, Vanderbilt University, University of Chicago, Fermilab, Caltech, and UC Santa Cruz. I will share my drive to understand the nature of Dark Energy and the universe as a whole. I will describe my research as an instrument scientist designing the next generation of Gravitational Wave detectors and how I do so with the exciting field of metamaterials. What I will not leave out of this narrative is the additional work I need to do, because of my identities, to traverse the current system that we live in within physics, STEM, and academia. I will share what I have done along the way to improve the working conditions for myself and everyone around me. By sharing my story, I hope you will find inspiration and tangible ideas about how you can participate in elevating what we do in physics and create a version of science that genuinely embraces each and every one of us. Through this transformation, we will be able to ask new kinds of questions and bring in all the creativity and imagination needed to answer them.