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Elementary Physical Sciences Academy - Engaging PhysTec sites in laying the foundation for excellence in elementary physical science teaching MICHAEL FALK, Johns Hopkins University, Whiting School of Engineering, EKATERINA DENISOVA, Baltimore City Schools, ALISHA SPARKS, CHRISTINE NEWMAN, Johns Hopkins University, Center for Educational Outreach — We propose a project whereby APS PhysTec sites would be leveraged to build a strong foundation for inquiry-led elementary physical science education nationwide by simultaneously building science teacher leadership capacity and raising the bar for elementary school teacher preparation in physical science. The first prong of this strategy involves engaging PhysTec pre-service teachers along with local in-service physical science and/or elementary teacher partners in on-line and in-person learning experiences around educational leadership and professional development pedagogy. These educational activities will culminate in the PhysTec pre-service/in-service teacher teams advocating for and delivering a professional development course for elementary teachers. This "Physical Science Academy," developed as part of a National Science Funded Math and Science Partnership Grant between Johns Hopkins University and Baltimore City Schools teaches basic concepts in physical science through inquiry. By preparing future teacher leaders able to teach peers as well as students the foundational concepts of our discipline, this project will lay the groundwork for implementation of new Next Generation Science Standards in physical science at the elementary level.

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