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Abstract for an Invited Paper
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Mindset Guiding Skillset: The Physicists Toolset for Innovation.¹

BAHRAM ROUGHANI², Loyola University Maryland

The unique characteristics of Physics graduates including depth of scientific knowledge and breadth of technical skills may be the necessary but not the sufficient factor for career success. The dichotomy of physics is having some physicists as social icons, but not enough students as physics majors. It also includes the wrong perception about limited career options for physics majors, while nearly 95% of physics graduates are working for government, industry, business, and startups. One may question whether physics teaching has evolved adequately address the needs of the innovation ecosystem. This has motivated us to develop physics modules, starting with introductory physics courses, to highlight the social impact of physics, in order to ignite the passion for physics. Efforts of Physics Innovation and Entrepreneurship (PIE), including the PIPELINE Network*, support the goals of the “Phys21: Revamp Undergraduate Physics”, which was developed by APS and AAPT. The PIE education efforts also provide greater awareness and recognition for alternative physics career paths and options that resonates with the needs of a growing population of entrepreneurially-minded college-age students.

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²Special Session:36 mintes