

Preface

The theme of the 2020 Physics Education Research (PER) Conference was *“Insights, Reflections, & Future Directions: Emergent Themes in the Evolving PER Community.”* This theme suffused both the organization and the communication regarding the conference: in the run-up to the conference, the organizing committee prepared and produced a blog touching upon various topics of import to the community, and -- despite the tremendous challenges wrought by the events of the year 2020 -- the conference theme was also apparent in the sessions and plenary sections of the conference.

The plenary bridging session took the format of a panel discussion moderated by the organizing committee and featuring community members from a variety of areas of expertise: Geraldine Cochran, Joseph Krajcik, Sarah B. McKagan, Valerie K. Otero, and Robert H. Tai. The lively panel discussion centered around the conference theme and touched upon issues such as defining and disrupting the idea of expertise within a discipline, questions that move beyond practice and policy, and even what -- and who -- defines physics.

PERC 2020 saw a huge departure from traditional conference implementation, as several professional organizations, including the PER community and its leadership, struggled to adapt to the changing constraints of the COVID-19 pandemic. PERC 2020 was hosted in an online format, with all of the modifications that implies. Dine & Discuss dinner groups were modified to Snack & Chat teleconference hangouts; game night was remote; hotel lobby conversations were hosted in a virtual game-like space; and many others. The organizing committee worked extremely hard to successfully adapt the bridging plenary and closing sessions, as well as the rest of the conference, to the online format. The latter also included a memorial tribute to the late Lillian McDermott from PERLOC member Stamatis Vokos.

The PERC 2020 organizing committee included Alexis Knaub, Beth Cunningham, Lin Ding, and Steve Maier. The committee was supported in their efforts by leadership from both the American Association of Physics Teachers (AAPT) and the PER Leadership and Organization Council (PERLOC).

The PERC Proceedings online submission and review process was supported by Lyle Barbato and Bruce Mason, who work closely with the editors to ensure smooth functioning of the online system. New to the 2020 Proceedings cycle was the implementation of a double-confidential format of peer review. The shift to this new format required hundreds of person-hours of effort beyond normal work, and the editorial team could not have made this implementation without Lyle's guidance and logistical support. The editors also thank AAPT for their ongoing Proceedings sponsorship, and for allowing it to be published open-access through the ComPADRE website.

As in every year, the editors wish to thank the referees for volunteering their time and expertise to give feedback to papers submitted to the Proceedings. This year 262 reviewers made recommendations on 141 submitted Peer-Review Section papers -- both authors and reviewers

adapting quickly to the new double-confidential format, with its earlier submission deadline and shorter review turnaround time. The PERC Proceedings is both an important archive of findings and also a place where many new members of the field publish their first physics education research, and we are deeply appreciative of the authors reviewers who make this year's cycle possible. Future cycles will improve upon the implementation of the double-confidential review process, but for a first-time implementation, the editorial team could not be more appreciative of the community for their efforts.

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