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Abstract for an Invited Paper for the MAR09 Meeting of the American Physical Society

A Dozen Years and a Thousand Participants: The Workshops for Preparing New Faculty in Physics and Astronomy¹

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Beginning in 1996, an annual workshop for newly hired faculty in physics and astronomy has been held under the organizational leadership of AAPT, APS, and AAS. To date more than 1000 faculty have participated in this workshop, representing approximately 25% of the new hires at all U. S. institutions that award a baccalaureate in physics or astronomy, from 4-year colleges through research universities. The original motivation for the workshops was to improve physics teaching by introducing new faculty to instructional strategies and innovations that had been shown to be effective in a variety of contexts. The need for such a program was suggested in part by the belief that a national mentoring workshop could effectively address a commonality of physics and astronomy teaching challenges that transcended institutional characters and types, and also in part by the reaction to a significant decrease in the number of baccalaureate physics degrees awarded in the U. S. in the 1990s, which many believed was due to ineffective and uninspiring teaching at the undergraduate level and especially in introductory courses. Based on surveys of the participants (and their department chairs), we have found that a large fraction of the participants have become adopters of innovative teaching techniques and that they rate the workshops as the most significant cause of the improvements in their teaching. This talk will summarize the development of the workshop program since its inception, the measures of its success in improving teaching, and the plans for its future.

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