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Editors

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Introduction

It is with great pleasure that we write this introduction to the proceedings of a successful Optical System Alignment, Tolerancing, and Verification conference in 2015. This ninth conference showed signs of great change and increasing capability in the field. The optics and photonics community again bestowed upon us the honor of editing a set of excellent talks and posters into this proceedings volume. The attendance at our Sunday sessions showed that the conference topics are of current interest, useful, and of central importance to the community.

This year's conference had four great sessions. The opening session had many attendees interested in two papers on freeform optics and asphere tolerancing respectively. The second session continued the theme of tolerancing with discussions on slope sensitivities for optical surfaces, a tolerance analysis tutorial-style paper, and a tolerance analysis paper for a transmission sphere. The first afternoon session had two linked alignment and verification papers for the key NIRCcam instrument being integrated into the James Webb Space Telescope. The third talk provided an overview and hardware for alignment, tolerances, and metrology fundamentals at the nano and microscales. The last talk in the first afternoon session discussed a one micrometer adjustment for helical laser drilling. The fourth session concluded the oral conference program with a talk that gave an overview of lens mounting methods in the context of a new precision optical mounting method, state estimation in optical system alignment, and alignment estimation performance analysis for a three mirror anastigmat. The poster session had two papers total. The first paper covered an analysis of the alignment tolerance of a focal plane assembly in a telescope and the second discussed development of a large ground-based fast steering mirror assembly. The reader will enjoy and benefit from reading these papers.

As chairs of a tight-knit and popular conference, we once again must humbly thank our program committee for the support they have continued to provide this conference. We are also grateful to all of the presenters for sharing their work, the audience for participating and helping to facilitate conversations at the conference, and to SPIE for providing us the opportunity to cover these important topics at Optical System Alignment, Tolerancing, and Verification IX in 2015.

We are happy and excited to chair this conference again in 2016. We encourage everyone interested in any related research or development projects to please submit their work and attend the conference. Without great participation this conference would not have a strong tradition of keeping the important topics of alignment, tolerancing, and verification at the forefront of the optics and

photonics conference. Please feel free to contact us or anyone on our program committee if you have any questions. We look forward to another successful conference in 2016.

José Sasián
Richard N. Youngworth