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**José Sasián
Richard N. Youngworth**
Editors

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Introduction

This year marked the sixth time this annual conference has taken place in beautiful San Diego, California, USA, at the SPIE's Optics & Photonics symposium. The 2012 Optical System Alignment, Tolerancing and Verification VI conference was very successful. The conference consisted of a day of high quality presentations, the poster session, and subsequent proceedings articles. We sincerely thank our invited speakers, contributed speakers, poster paper presenters, and the superb community for making the sessions and conference such a success. It is very clear that the topics covered by this conference continue to be of great interest to the optics and photonics community.

This year the conference had four strong sessions on desensitizing and tolerancing, alignment and baffle tolerances in space systems, verification and optomechanics, and optical system alignment. The first session had a great contributed paper on micro-optical interconnection and then two invited talks on tolerancing for visual systems and a practical method for cost-based tolerancing. The second session had three great papers on alignment of x-ray mirror components using pneumatic actuators, alignment laboratory solutions for the ATLAS instrument, and stray light and baffle assembly sensitivity analysis of the Formosat-5 telescope. After lunch, the third session had talks on the design and testing of an athermal SWIR gas correlation imager, rapid spatial characterization measurements of a multi-element focal plane, a support structure for a compliant deformable mirror, and a commercial astronomical telescope modified for viewing the interior of the NIF chamber. The last section had presentations on use of a flat panel display for measuring sine condition violations, practical alignment using an auto-stigmatic microscope, optomechanical design and alignment strategies demonstrated on a zoom lens (presentation only), a computer-aided alignment method using RMS wavefront error as optimization criterion, and an invited talk on binocular collimation versus conditional alignment. The poster session featured papers on design and tolerancing of an Offner imaging spectrograph, alignment and iso-static alignment of mount bonding for a Cassegrain aerospace primary mirror, optomechanical and thermal integrated analysis of a new cryogenic refractometer, verification of a Fresnel lens for a high concentration photovoltaic system, and an off-axis type aspheric test using an off-axis type asphere.

This year's conference has been truly outstanding. We must of course thank our excellent program committee for continuing to promote this conference. Furthermore, we are once again quite grateful to the greater community for sharing work and participating, as interaction in this area is very beneficial in advancing our field. Finally we thank the fine volunteers and SPIE staff for providing us the opportunity to cover the subjects of optical system alignment, tolerancing, and verification in a dedicated conference and proceedings.

This conference will continue in 2013. We encourage everyone interested in optical system alignment, tolerancing, and verification to look for the call for papers and to submit your work in early 2013. We certainly value all of the quality submissions as well as the opportunity to help facilitate and take part in the community's interaction. Please feel free to contact us or anyone on our program committee if you have any questions. We look forward to seeing you next year.

José Sasián
Richard N. Youngworth