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José Sasián
Richard N. Youngworth
Editors

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Contents

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2 Alignment Techniques, NIF, and Photonics
Sen Han, Suzhou H&L Instruments LLC (China)

Introduction

We sincerely thank the authors, audience, and committee members for making the 2011 Optical System Alignment, Tolerancing and Verification V conference an outstanding success. We had excellent talks, posters, and papers on a variety of topics. The audience attendance was substantial at both the oral and poster sessions. The conference topics clearly continue to be of great interest to the community.

This year the conference had four strong sessions on design for tolerancing; alignment techniques, the National Ignition Facility (NIF), and photonics; tolerancing and verification; and telescopes, stray light, and modeling. The conference started on a high note with excellent papers on optical system design techniques that aid greatly in tolerancing and alignment including selective assembly, desensitization, and considerations for plastic optical systems. The second session had papers on fundamental alignment using the sine condition, alignment of the National Ignition Facility, design and assembly of a Doppler velocimetry probe, and utilization of a point-source microscope with off-axis mirrors. The first afternoon session had papers on tolerancing and unusual optical systems, multi-objective optical design for tolerancing, and tolerancing aspheres. The oral sessions concluded with a number of talks on high end systems including alignment of the Large Binocular Telescope, LIDAR metrology for use with large mirrors, pupil alignment for compound instruments including large deployable space telescopes, and stray light and alignment estimation. We were pleased to have posters presented on a variety of subjects including a GD&T in opto-mechanical design, a cost study for lens barrel design, low uncertainty alignment with CGHs, and a paper revisiting relevant statistics in tolerancing.

We thank again our program committee for continuing to promote the conference. We are grateful to the greater community for sharing work and participating. We had authors travel from abroad and thank them for their enthusiasm and for making a long trip to participate. We strongly feel that the interaction we see at this conference is very beneficial in advancing this useful field. We thank SPIE 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 2012 and we encourage everyone interested in optical system alignment, tolerancing, and verification to please submit their work and attend the sessions. 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 at a very strong and beneficial conference.

José Sasián
Richard N. Youngworth