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Call for Papers

Optical System Alignment, Tolerancing, and Verification VI (OP311)

Part of the SPIE International Symposium on SPIE Optical Engineering + Applications
12–16 August 2012 • San Diego Convention Center • San Diego, CA United States

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The topics of tolerancing, alignment, and verification are crucial in the development of successful optical systems. The assembly of actual optical systems requires alignment of different system components. The precision level of the alignment depends on the assigned tolerance error budget, and so alignment and tolerances are interrelated. Verification involves validating optical system performance, including assurance of performance under a variety of operating conditions.

This conference seeks to further the state-of-the-art in alignment and tolerancing, including verification of subsystems and at the system level, by providing a forum where these essential topics can be discussed. The conference also seeks to provide the audience with past and current insights in these topics. This sixth conference continues to build on the successful conferences held at SPIE Optics+Photonics from 2007-2011.

Papers are solicited in the following areas:

- theories of alignment and tolerancing
- approaches to tolerancing and error budgets
- tolerance desensitization and nominal design

- integrated optical design with tolerancing and design for manufacturability
- modeling and simulation for alignment, tolerancing, and verification
- alignment techniques, equipment, and tools
- optical alignment examples
- alignment in traditional lens systems
- alignment of micro optics
- alignment of coherent and high power optical systems
- optical alignment of nanostructures
- case studies and alignment pitfalls
- alignment and tolerancing of aspheres
- loosening tolerances using active elements
- alignment in electro-optical systems
- alignment in metrology applications
- alignment of fiber optic systems
- active optical system alignment and tolerancing
- system verification approaches
- examples and applications of system verification
- tools and techniques for verification.

Abstract Due Date: 30 January 2012
Go to <http://spie.org/OP311> to submit abstract

Manuscript Due Date: 18 July 2012

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- Ensure that all clearances, including government and company clearance, have been obtained to present and publish. If you are a DoD contractor in the USA, allow at least 60 days for clearance.

Submit an abstract and summary online at:

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- Please submit a **250-word text abstract** for technical review purposes that is suitable for publication. SPIE is authorized to circulate your abstract to conference committee members for review and selection purposes.
- Please also submit a **100-word text summary** suitable for early release. If accepted, this summary text will be published prior to the meeting in the online or printed programs promoting the conference.
- Only original material should be submitted.
- Abstracts should contain enough detail to clearly convey the approach and the results of the research.
- Commercial papers, papers with no new research/development content, and papers where supporting data or a technical description cannot be given for proprietary reasons will not be accepted for presentation in this conference.
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