INTERNATIONAL JOURNAL OF OPTOMECHATRONICS

Special Issue on

Advances in Optomechatronics for Adaptive Optics Systems

Guest Editor

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Adaptive optics (AO) systems are used in various application areas to enhance the performance of optical systems. Typically, AO systems make use of active optical elements, i.e. wavefront correctors, to introduce appropriate adjustments in the properties of the light beam. These adjustments lead, for example, to the removal of image distortions in imaging systems, hence providing clear images of the object being imaged, or allow for the efficient delivery of a laser beam in various applications including laser systems, manufacturing, free space optical communications…

Recent developments in optomechatronic systems targeted at AO applications cover two main areas, namely the development of novel wavefront correctors and wavefront sensors, and the development of advanced control and signal processing algorithms. This special issue will present recent advances in the optomechatronic aspects of AO systems. Topics of special interest include:

- Advances in the design of wavefront correctors and wavefront sensors for AO systems.
- Control system design and signal processing algorithms for AO systems.
- Recent developments and challenges in the optomechatronic design of AO systems for various application areas such as astronomical imaging, retinal imaging, microscopy systems, manufacturing applications, free space optical communications…

Contributed papers in other relevant areas are also welcome.

Submissions Procedure

Call for Papers Submission Deadline May 15, 2010

Authors should prepare manuscripts according to the **Instruction for Authors** in the journal's On-Line submission Site (http://mc.manuscriptcentral.com/uopt). In addition, authors must indicate in their cover letter to the Editor-in-Chief that the manuscript is submitted for publication in the **Special Issue on Advances in Optomechatronics for Adaptive Optics Systems.**

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