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Adaptive Optics and Wavefront Control for Biological Systems

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Introduction

Adaptive optics and wavefront control have greatly expanded the capability of optical microscopy and measurements in biological systems. Recent breakthroughs in measuring and controlling high-order optical wavefront have led to many important applications, including deep tissue microscopy with improved imaging quality and depth, optical tweezers with sophisticated shape and momentum distribution, and three-dimensionally patterned optogenetic excitation. This conference proceedings volume includes contributions from leading experts in a variety of research fields that employ innovative adaptive optics and wavefront control technologies for biomedical applications.

Thomas G. Bifano
Joel Kubby
Sylvain Gigan