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Gilles Cheriaux Chris J. Hooker Michal Stupka Editors

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Contents

- vii Conference Committee
- ix Introduction

Liquid crystalline nonlinear optical metamaterials with low-loss tunable negative-zero-positive refractive indices (Plenary Paper) [6587-203]

I. C. Khoo, A. Diaz, D.-H. Kwon, D. H. Werner, Pennsylvania State Univ. (USA)

SESSION 1 HIGH-POWER LASER SYSTEM ADAPTIVE OPTICS

6584 02 Adaptive optics at the PHELIX laser (Keynote Paper) [6584-01]

H.-M. Heuck, U. Wittrock, Münster Univ. of Applied Sciences (Germany); J. Fils, S. Borneis, K. Witte, U. Eisenbart, D. Javorkova, V. Bagnoud, S. Götte, A. Tauschwitz, E. Onkels, Gesellschaft für Schwerionenforschung mbH (Germany)

6584 03 Design principle and first results obtained on the LMJ deformable mirror prototype (Invited Paper) [6584-02]

C. Grosset-Grange, J.-N. Barnier, C. Chappuis, H. Cortey, CEA Cesta (France)

Wavefront correction and aberrations pre-compensation in the middle of Petawatt-class CPA laser systems [6584-03]

F. Canova, L. Canova, A. Flacco, R. Clady, J.-P. Chambaret, Lab. d'Optique Appliquée, CNRS, ENSTA-Ecole Polytechnique (France); F. Plé, M. Pittman, Lab. d'interaction du rayonnement X avec la matière (France); T. A. Planchon, Colorado School of Mines (USA); M. Silva, R. Benocci, G. Lucchini, D. Batani, Univ. Milano-Bicocca (Italy); E. Lavergne, G. Dovillaire, X. Levecq, Imagine Optic (France)

6584 05 Monomorph large aperture adaptive optics for high peak-power femtosecond lasers [6584-04]

G. Cheriaux, J.-P. Rousseau, F. Burgy, Lab. d'Optique Appliquée, CNRS, ENSTA, Ecole Polytechnique (France); J.-C. Sinquin, J.-M. Lurçon, C. Guillemard, CILAS (France)

SESSION 2 ASTRONOMICAL ADAPTIVE OPTICS AND APPLICATIONS

- 6584 07 **Review of astronomical adaptive optics systems and plans (Invited Paper)** [6584-06] N. Devaney, National Univ. of Ireland, Galway (Ireland)
- Optical wavefront differentiation: wavefront sensing for solar adaptive optics based on a LCD [6584-07]

D. Schmidt, O. von der Lühe, Kiepenheuer Institut für Sonnenphysik (Germany)

6584 09 High order optical aberrations influence to precision of astronomical image data processing [6584-08]

M. Řeřábek, P. Páta, Czech Technical Univ. in Prague (Czech Republic); P. Koten, Astronomical Institute (Czech Republic)

SESSION 3	WAVEFRONT GENERATION, BEAM SHAPING, AND MEASURING TECHNIQUES				
6584 OA	Surface tension determination using liquid sample micromirror property [6584-09] J. Hošek, Czech Technical Univ. in Prague (Czech Republic)				
6584 OB	Symmetry descriptors for Si wafer characterisation for scanning helium atomic beam microscopy mirror [6584-10] J. Galas, D. Litwin, S. Sitarek, Institute of Applied Optics (Poland); B. Surma, B. Piątkowski, Institute of Electronic Materials Technology (Poland)				
6584 OD	Smart lens: tunable liquid lens for laser tracking [6584-12] FY. Lin, National Tsing Hua Univ. (Taiwan); LY. Chu, National Chiao Tung Univ. (Taiwan); YS. Juan, National Tsing Hua Univ. (Taiwan); ST. Pan, SK. Fan, National Chiao Tung Univ. (Taiwan)				
6584 0E	Wave front generation using a phase-only modulating liquid-crystal-based micro-display with HDTV resolution [6584-13] A. Hermerschmidt, S. Osten, S. Krüger, HoloEye Photonics AG (Germany); T. Blümel, FISBA OPTIK GmbH (Germany)				
6584 OF	Adaptive optics system to accurately measure highly aberrated wavefronts [6584-14] M. Ares, S. Royo, Technical Univ. of Catalunya (Spain)				
6584 OG	Tunable electro-optical lithium niobate phase array for wavefront modulators [6584-15] M. Paturzo, P. Ferraro, Istituto Nazionale di Ottica Applicata, CNR (Italy); S. De Nicola, Istituto di Cibernetica, CNR (Italy); P. De Natale, Istituto Nazionale di Ottica Applicata, CNR (Italy); G. Pierattini, Istituto di Cibernetica, CNR (Italy)				
SESSION 4	LASER SYSTEM ADAPTIVE OPTICS SIMULATIONS AND APPLICATIONS				
6584 OH	Generation of 1.2 X diffraction-limited focal spot from the 100 TW Ti:sapphire laser system (Invited Paper) [6584-22] T. M. Jeong, I. W. Choi, N. Hafz, J. H. Sung, DK. Ko, J. Lee, Gwangju Institute of Science and Technology (South Korea)				
6584 OI	Computational model for time development of the EM field in pulsed laser systems [6584-18] D. Škrabelj, Fotona (Slovenia); M. Marinček, Fotona (Slovenia) and Jozef Stefan Institute (Slovenia); I. Drevenšek-Olenik, Univ. of Ljubljana (Slovenia) and Jozef Stefan Institute (Slovenia); M. Leskovar, Fotona (Slovenia); M. Čopič, Univ. of Ljubljana (Slovenia) and Jozef Stefan Institute (Slovenia) POSTER SESSION				
6584 OM	Target alignment on the LIL laser facility [6584-23] M. Mangeant, JL. Dubois, R. André, P. Dupont, V. Moreau, C. Lissayou, C. Lanternier, E. Bar, S. Devaure, A. Perrin, P. Auliac, Y. Schiano, Commissariat à l'Energie Atomique (France)				

6584 ON

Time fiducial on the LIL facility at CEA/CESTA [6584-24] Y. Schiano, E. Bar, A. Richard, C. Feral, P. Darquey, Commissariat à l'Énergie Atomique (France)

Author Index

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- High-Power Laser System Adaptive Optics
 Chris J. Hooker, Rutherford Appleton Laboratory (United Kingdom)
- Astronomical Adaptive Optics and Applications
 Petr Škoda, Astronomical Institute Ondrejov (Czech Republic)

- 3 Wavefront Generation, Beam Shaping, and Measuring Techniques Gilles Cheriaux, École Nationale Supérieure de Techniques Avancées (France)
- 4 Laser System Adaptive Optics Simulations and Applications **Michal Stupka**, Institute of Physics (Czech Republic)

Introduction

We are pleased to present the proceedings of the SPIE conference on Adaptive Optics for Laser Systems and Other Applications, held in the city of Prague in the Czech Republic in April 2007. There are few subjects where there is such a range of topics that can be covered under one general heading, but adaptive optics is certainly one of those subjects. As the title suggests, this conference was slanted toward the use of adaptive optics in laser systems, but the committee were delighted to receive many high-quality contributions from workers in other areas. Consequently, it was possible to compare the applications of the technology in many disciplines, identify common ground, and to learn new ideas from one another. The papers presented at the conference ranged from astronomy, which was the original inspiration for the development of adaptive optics technology and which continues to drive it to this day, through applications in high-powered lasers that are breaking new ground in attaining the highest energy densities, to subtle techniques involved in the measurement of important physical parameters and to innovative techniques in ophthalmic medicine. A number of papers on simulations and modelling of phase correction of optical beams made up the balance of contributions and completed a well-rounded conference.

We would like to thank the members of the programme committee for their hard work in recruiting and encouraging contributors and for assessing all the submissions, and the authors and presenters of the papers for their contributions to an interesting and highly enjoyable conference.

Michal Stupka Gilles Cheriaux Chris Hooker