## **Australian Optical Society Conference 1986**

Melbourne, 3-5 December

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Authors	Title	Page
	WEDNESDAY 3 DECEMBER	
JM Bennett	Invited: Surface evaluation techniques for the optics of the	
	future	
A Hughes	Invited: Physiological optics: interface between microcosm and	
	macrocosm	
GR Cole	Luminance and chromaticity signal processing in the human	
	visual system	
CJ Woodruff, KK Benke &	Towards an interface between image processing and human	
DR Skinner	perception of visual texture	
DA Atchison	Optical performance of progressive power lenses	
WS Jagger & A Hughes	Modelling the eye's performance	
MD Kidger	Invited: Advances in optical design using personal computers	
CJ Mitchell	Simplex optimisation of holographic grating spectrographs	
ZS Hegedus	Superresolution in scanning optical microscopy	
PR Rowland	The defence precision optics industry	
	THURSDAY 4 DECEMBER	
FA Hopf	Invited: Chaos in optics	
WR MacGillivray	An absolute frequency marker - the "central feature" of a laser-	
	irradiated, sodium-filled, Fabry-Perot etalon	
IM Bassett	Phase-space-like constraints on optical networks	
JA Hermann	Self-focussing and self-bending by a non-linear phase corrector	
BJ Thompson	Invited: Design of coherent imaging systems	
MS Brown	A time integrating acousto-optic correlator using two Kosters	
	double imaging prisms	
P Hariharan & BF Oreb	Stroboscope holographic interferometry: Application of digital	
	techniques to the study of vibrating objects	
DJ Bone & H-A Bachor	Automated analysis of interferograms	
WJ Sandle	Invited: Atoms in laser-driven cavities: What happens and what	
	can we learn?	
MD Reid & DF Walls	Invited: Squeezed states of light: A general review and recent	
	developments	
JV Hajnal	Invited: Polarisation structure too complicated? Singularities	
	may help!	
PR Gillingham	High resolution imaging on the Anglo-Australian Telescope	
PM Gray	Astronomical uses of optical fibres	
	Poster Session	



AG Doolette	A laboratory solar radiation simulator	
PTH Fisk, H-A Bachor & RJ	The dynamic Stark effect in a J= $0\rightarrow1\rightarrow0$ three level system:	
Sandeman	investigation of power broadened Autler-Townes doublets	
MJ Goodspeed	Measurements of refractive turbulence intensity	
Z Hegedus, V Safaris, A	Pupil filters in confocal microscopy	
Carlini, H Matthews, C		
Sheppard, T Wilson & D		
Hamilton		
YH Ja	Real time image translation and differentiation by four-wave	
	mixing	
DJ Jones	The design of an f/1.0 germanium triplet lens for a thermal	
	infrared spectrograph camera	
SJ Rumble, KC Watters &	Applications of Moire and holographic interferometry	
B Lawrie		
RC Schaeffer	Optical coatings - design and production aspects	
SB White & DR McKenzie	Optical properties of hydrogenated germanium carbon alloys	
	FRIDAY 5 DECEMBER	
KA Nugent	Invited: Incoherent holography using coded apertures	
WJ Tango	The Sydney University Stellar Interferometer: An update	
WE James & P Hariharan	Line-diffraction Interferometer	
BJ Thompson	Holographic particle size and velocity measurements	
JD Harvey	Invited: Optical pulse compression in the visible and infra red	
LB Whitbourn, JE	Development of an airborne carbon dioxide laser system for	
Eberhardt & JG Haub	active remote sensing of minerals	
RS Seymour	Acousto-optical scattering in optically active paratellurite	
GRJ Williams	Non-linear optical properties of organic materials	
JL Gardner & WJ Brown	Absolute radiometry - silicon vs the Australian standard	
RC McPhedran, A	Invited: Long wavelength diffraction optics	
Roberts, RC Compton &		
DB Rutledge		
LB Whitbourn	Phase shifts of thin metallic grids on dielectric substrates:	
	theory and experiment	
JC Macfarlane, PA	Measured characteristics of bow-tie microbolometers at a	
Stimson & LB Whitbourn	wavelength of 433 microns	
M Kidger	Some techniques for solving particular lens design	
A Roberts	Electromagnetic theory of diffraction by a circular aperture in a	
	thick, perfectly conducting screen	
MD Waterworth & M	A laser ignition device	
Newell		
L		

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