	M, 25 June	Tu, 26 June	W, 27 June	Th, 28 June	F, 29 June
8:30-9:00	Breakfast	Breakfast	Breakfast	Breakfast	Breakfast
9:00-9:20	Opening	Art and	Techniques	Digital	Digital
	Session and	Holography	and Materials	Techniques	Techniques
	Reports from	Setsuko Ishii (JP)	Hans Bjelkhagen	Pierre St. Hilaire,	Kyungsuk Pyun
	the Nations	Artistic	(Glyndwr	Nasser	(Samsung
		representation		Peyghambarian,	Advanced
		with pulsed	Ultra-realistic 3-D		Institute of
		holography	imaging based on		Technology, KR)
			color holography		Integrated optical
				Christenson,	means for
				Ram	hologram
				Voorakaranam	recording
				(University of	
				Arizona, US) Are stereograms	
				holograms? A	
				human	
				perception	
				analysis of	
				sampled	
				perspective	
				holography	
9:20-9:40	Reports from	Betsy Connors	Andreas	Douglas Lanman,	Henry Smith
	the Nations	(ACME	Sarakinos, Alkis	Gordon	(MIT, US) and
	(continued)	Holography, US)	Lembessis, and	Wetzstein,	Michael Walsh
		LightLeaves:	Nikos Zervos	Matthew Hirsch,	(LumArray, Inc.,
		landscape	,	and Ramesh	US) An innovative
		reflection	of Holography,	Raskar (MIT	tool for fabrication
		hologram	GR) A	Media Lab, US)	of computer-
		installation with	transportable	Depth of field analysis for	generated
		computer controlled lighting	system for the in situ recording of	multilayer	holograms
		and a brief	color Denisyuk	automultiscopic	
		discussion of	holograms of	displays	
		other work	Greek cultural	alopiayo	
		outer work	heritage artifacts		
			in silver halide		
			panchromatic		
			emulsions and an		
			optimized		
			illuminating		
			device for the		
			finished		
			holograms		
I	1				

9:40-10:00	Reports from the Nations (continued)	Andrew Pepper (Nottingham Trent University, UK) Holography without frames: sculptural installations incorporating 'drawn' elements	Abhay Jith (University of Hyderabad, IN) A holographic color camera for recording artifacts	and Norbert Leister (SeeReal Technologies, DE) Computational hologram synthesis and representation on spatial light modulators for real-time 3D holographic imaging	
10:00-10:20	Education and Holography Tung H. Jeong (Lake Forest College, US) Art- science, beauty- reason, and holography	Rosa Maria Oliveira (University of Aveiro, PT) From mimetism to immateriality in art holography: different approaches and concepts	John Klayer (US) Cave holography – out of the lab and under the ground	Petr Lobaz (University of West Bohemia, CZ) Discrete calculation of the off-axis angular spectrum based light propagation	Break
10:20-10:40	(continued)	Break	Break	Break	Commercial and Applied Holography Ian M. Lancaster (Reconnaissance International, UK) Commercial display holography: a history of failure?
10:40-11:00	Break and Group Photo	Rob Taylor (Forth Dimension Holographic Technologies, US) A curious conundrum: the state of holographic portraiture in the 21st century	P. T. Ajith Kumar (Light Logics Holography and Optics, IN) A new display holography studio system for portraiture and art holography	touching the ethereal	Craig Newswanger and Michael Klug (Zebra Imaging, US) Holograms by/for the masses

11:00-11:20	Alexandre	Seth Riskin (MIT	Robert Hess	Peter Hobson,	Ardeshir
11.00 11.20	Escarguel (Aix	Museum, US)	(Point Source	Jindrich	Osanlou, Hans
	Marseille	The jeweled net:	Productions, US)	Nebrensky, and	Bjelkhagen
	University, FR)	views of	A survey of lasers	• •	(Glyndwr
	and Thibaut	contemporary	at the birth of	University, UK)	University, UK),
	Voslion	holography	holography	Challenges in	Evangelos Mirlis
	(Université de		0 , ,	using GPU for the	•
	Provence, FR) An			real-time	Ltd, UK), Peter
	easy physics			reconstruction of	Crosby (CMO,
	outreach and			digital hologram	UK), Angela
	teaching tool for			images	Shore (Peninsula
	holography			ŭ	College of
	J , ,				Medicine, UK),
					Phil Henderson (
					Gooch and
					Housego PLC,
					UK), Bruce
					Napier (Vivid
					Components Ltd.,
					UK) Optimized
					processes in full
					color holographic
					endoscopy
11:20-11:40	Takeshi	Mike Finegan	Kaveh Bazargan	Yuji Sakamoto,	Marek Skeren,
	Yamaguchi and	(Creative	(holographer.org,	Takuo Yoneyama	Martin Nyvlt, and
	Hiroshi	Engineering, US)	UK) What are the	(Hokkaido	Jakub Svoboda
	Yoshikawa (Nihon	Comparing oil	ideal wavelengths	University, JP)	(Czech Technical
	University, JP)	paintings and	for full-color	and Fumio	University, CZ)
	New education	their true color	holography?	Okuyama	Design and
	system for	holograms from a		(Suzuka	visualization of
	construction of	painter's		University of	synthetic
	optical	perspective		Medical Science,	holograms for
	holography setup			JP) Calculation	security
	tangible learning			method of CGH	applications
	with augmented			for binocular	
	reality			eyepiece-type	
				electro	
				holography	

11:40-12:00	Richard Bruck (Columbia College Chicago, US) Going deeper: teaching more than the mechanics	Dieter Jung (Academy of Media Arts (Prof. Emeritus), DE) Moments of seeing	University in Prague, CZ), Antonin Havranek (Charles University in Prague, CZ) New recording material with AgBr nanoparticles for optical holography	and Yuji Sakamoto (Hokkaido University, JP) A rendering method of background reflections on a specular surface for CGH	from stereo images to multi view
12:00-1:00	Lunch	Lunch	Lunch	Lunch	Stephen Hart, Daniel Burman, Colin Stevens (Holorad, US), Bill Brockbrader (Radiance Laser, US), William Molteni (US), Dinesh Padiyar, Joyce Padiyar (Triple Take Holographics, US), Wayne Parris (PMP® Independent Consultant, US), Daniel Reetz (Disney Research , US), Michael Shara (The American Museum of Natural History, US) A stellar hologram (till 12:20)

1:20-1:40	Pedro Pombo and Rosa Maria Oliveira (University of Aveiro, PT) Project Traveling Holography: art and science on the go Odile Meulien	Sally Weber (US) For a photon there is only the present Sandra Oliveira		Gordon Wetzstein, Douglas Lanman, Matthew Hirsch, and Ramesh Raskar (MIT Media Lab, US) Real-time image generation for compressive light field displays Sebastian Mader,	Lunch (12:20- 1:00)
1.20-1.40	Öhlmann (University Strasbourg, DE) and Dietmar Öhlmann (Syn4D, DE) 3D and education	and Martin Richardson (De Montfort University, UK) The future of holographic technologies and their use by artists	and Joyce Padiyar (Triple Take Holographics, US) Aberrations in holography	Wayne Tompkin, (OVD Kinegram AG, CH) and Tomasz Kozacki (Warsaw University of Technology, PL) Limits of computational white-light holography	
1:40-2:00	Martina Mrongovius (Center for the Holographic Arts, US) and Harris Kagan (Ohio State University, US) The Center for the Holographic Arts new residency program and hands on teaching at Ohio State University / Martina Mrongovius (Center for the Holographic Arts, US) Looking back and forward, Holography at the Academy of Media Arts Cologne (KHM) (10 minutes each)		Ed Wesly, (Harrington College of Design, US) Quantitative measurement of holographic image quality using Adobe Photoshop	Koki Wakunami and Masahiro Yamaguchi (Tokyo Institute of Technology, JP) Occlusion processing for computer generated hologram by conversion between the wavefront and light-ray information	

2:00-2:20	Break	Dietmar Öhlmann (Syn4D, DE) and Odile Meulien Öhlmann (University Strasbourg, DE) "Kunstwerk" in the age of holography	Tristan Duke (Museum of Jurassic Technology and the Optics Division of the Metabolic Studio, US) Drawing light- fields: hand- drawn approaches to abrasion holography	Hao Zhang, Qiaofeng Tan, and Guofan Jin (Tsinghua University, CN) Full parallax three-dimensional computer generated hologram with occlusion effect using ray casting technique	
2:20-2:40	Art and Holography David Warren (AU) Hololujah: a one kilometre art hologram	Break	David Brotherton-Ratcliffe (Geola Technologies Ltd, UK) A new type of coupled wave theory capable of analytically describing diffraction in polychromatic gratings and holograms	JiYong Park (Kwangwoon	
2:40-3:00	John Perry (Holographics North, US) Artist Projects at Holographics North	August Muth (The Light Foundry, US) Investigating the spherical nature of light through large format DCG emulsions on glass	Break	Break	

3:00-3:20	Ya-Ling Huang (Kun Shan University, TW) Traversing time and space from the Blessing Window	Rocio Garcia Robles (University of Seville, ES) and Rosa Oliveira (University of Aveiro, PT) The artistic use of parallax and lenses revealing the invisible in holography	Digital Techniques Lloyd LaComb, Pierre-Alexandre Blanche, Ram Voorakaranam, Pierre St. Hilaire, Brittany Lynn, Nasser N. Peyghambarian (University of Arizona, US), Arkady Bablumyan, Richard Rankin (TIPD LLC, US), Michiharu Yamamoto (Nitto Denko Technical, US) Recent advancements in photorefractive holographic imaging	Jakub Svoboda, Pavel Fiala, Milan Kveton, Marek Skeren (Czech Technical University in Prague, CZ) Holographic 3D imaging — methods and applications	
3:20-3:40	Maria Isabel Azevedo (University School of Arts of Coimbra, PT), Martin J. Richardson (De Montfort University, UK), and Luis Miguel Bernardo (University of Porto, PT) Across light: through colour II	Tom Cvetkovich (Art and Holographic Consulting, US) Holography at the Butler Institute of American Art	,	Kyoji Matsushima, Sumio Nakahara, Yasuaki Arima, Hirohito Nishi, Hiroshi Yamashita, Yutaka Yoshizaki, and Kohei Ogawa (Kansai University, JP) Computer holography: 3D digital art based on high-definition CGH	

3:40-4:00	Philippe Boissonnet (Université du Québec à Montréal, CA) The shifting appearance/disap pearance of holographic images: a specific visual quality emblematic of a dynamic ontology of perceptual and cognitive processes	Ana Maria Nicholson (Holocenter, US) A holographic collaboration	Sundeep Jolly and V. Michael Bove, Jr. (MIT Media Lab, US), Direct fringe imaging of diffraction specific coherent panoramagrams in photorefractive polymer for updatable three-dimensional holographic display	Special Amphibious Excursion Around Boston	
4:00-4:20	Electronics Technology Institute, KR) Coexistence	Poster Session (until 5:30)	Daniel Smalley, V. Michael Bove, Jr., James Barabas, Clark Della Silva, Sundeep Jolly (MIT Media Lab, US) Holovideo for everyone		
4:20-4:40	Paula Dawson (University of New South Wales, AU) and Masa Takatsuka (University of Sydney, AU), The Haptic Lines of Homeland		James Barabas and V. Michael Bove, Jr. (MIT Media Lab, US) Human factors for holographic imaging		

4.40 5:00	Vin Don Chara		Dichard Otal	<u> </u>	
4:40-5:00	Yin-Ren Chang		Richard Stahl,		
	and Martin		Veronique		
	Richardson (De		Rochus, Xavier		
	Montfort		Rottenberg,		
	University, UK)		Stefan		
	Drawing lines		Cosemans, Luc		
	with light in		Haspeslagh,		
	holographic		Simone Severi,		
	space		Geert Van der Plas, Gauthier		
			Lafruit, and		
			Stephane Donnay (IMEC,		
			BE) <i>Modular sub-</i>		
			wavelength		
			diffractive light		
			modulator for		
			high-definition		
			holographic		
			displays		
5:00-5:20	Martina		uispiays		
3.00-3.20	Mrongovius				
	(Center for the				
	Holographic Arts,				
	US) Moving				
	through a				
	multiplex				
	holographic				
	scene				
6:00-7:00	Dinner, with	Dinner and	Dinner	Dinner	
	continuous	Reception at			
	showing by Ed	MIT Museum			
	Wesley				
	(Harrington				
	College of				
	Design, US) By				
	the laser's red				
	glare: pictorial				
	historical				
	highlights of				
	previous				
	International				
	Symposia on				
	Display				
	Holography				
7:00-?	In Memoriam:		Showing of a		
7.00-!	Remembering		variety of short		
	Departed		videos about		
	Members of the		holography		
	Display		Inologiaphy		
			1	i	
	Holography Community				

Poster Papers (Tuesday 4:00-5:30)

DuckHee Cho (Sejong University, KR) Holography and art

Melissa Crenshaw (Holographic Design, CA) Jerry Pethick: the missing history

Michael Crawford (nesteggs, US) Discovery and joy from dismissing stricture and embracing simplicity

Matthew Hirsch, Douglas Lanman, Gordon Wetzstein, and Ramesh Raskar (MIT Media Lab, US) Construction and calibration of optically efficient LCD-based multi-layer light field displays

Natalie Logan (OCAD University, CA) *Haptic holography: acoustic space and the evolution of the whole message*

Sumio Nakahara and Kyoji Matsushima (Kansai University, JP) Fabrication of CGH for 3D display holography using laser direct write lithography system

Dale Olson (University of Northern Iowa, US) Simple, complete, and novel quantitative model of holography for students of science and science education

Andrew Pepper (Nottingham Trent University, UK) Light Liquid: a holographic 'lake' installed on the roof of an architect's model townscape

Marek Skeren, Jakub Svoboda, Milan Kveton, Pavel Fiala (Czech Technical University, CZ) Fabrication of synthetic diffractive elements using advanced matrix laser lithography

Robin Walker (Columbia University Teachers College, US) Educational holograms as teaching agents

Philip Wilksch (RMIT University, AU) Method for evaluation of optical stability of the holographic recording environment

Jayne Wilton and Peter Hobson (Brunel University, UK) Visualizing breath using digital holography

Takeru Utsugi and Masahiro Yamaguchi (Tokyo Institute of Technology, JP) *A new approach for speckle reduction in holographic 3D printer*

Xiangsu Zhang, Shou Liu, and Xuechang Ren (Xiamen University, CN) Optical matching system for eliminating lateral position displacement of holographic images under varying laser wavelength