# PROGRAM OUTLINE

### Monday, September 9

Morning		Afternoon		
8:30 8:35	B. Hartline, Deputy Director, ANL Welcome to ANL J. M. Gibson, Assoc. Lab. Director for APS Welcome to APS	14:00	<u>Poster Session I</u> FEL Theory High-Power, Long-Wavelength FELs	
FEL Prize and First Lasings				
8:45	ME. Couprie (Prize Talk)			
MO-O-01	Chaos Studies on the Super-ACO Free Electron Laser			
<b>9:25</b> MO-O-02	<b>JM. Ortega (Prize Talk)</b> Two-Color Experiments with Infrared Lasers			
<b>10:05</b> MO-O-03	<b>T. Shaftan</b> First Lasing of the NSLS DUV FEL at 266 & 400 nm			
<b>10:13</b> MO-O-04	<b>E. Minehara</b> First Lasing of the JAERI Energy- Recovery Linac-Based FEL			
<b>10:21</b> MO-O-04A	<b>V. Litvinenko</b> First Generation of Coherent VUV Radiation in the OK-4/Duke SR FEL			
10:30-11:0	10:30-11:00 Coffee Break		00 Coffee Break	
	FEL Theory		High-Power, Long-Wavelength FELs	
11:00	W. Fawley (Invited)	16:00	R. Hajima	
MO-O-05	Issues and Subtleties in Numerical Simulation of X-ray FELs	MO-O-09	First Demonstration of Energy-Recovery Operation in the JAERI Superconducting Linac for a High-Power Free-Electron Laser	
<b>11:40</b> MO-O-06	<b>L. Giannessi</b> MOPA Optical Klystron FELs and Coherent Harmonic Generation	<b>16:20</b> MO-O-10	<b>D. Nguyen</b> Possibility of a MW-Class High-Gain Amplifier FEL	
<b>12:00</b> MO-O-07	<b>B. Hafizi</b> Electron Beam Conditioning for FEL Applications	<b>16:40</b> MO-O-11	<b>Y. Jeong</b> Upgrade of a Compact FIR FEL Driven by a Magnetron-Based Microtron for the Wavelength Range of 100-300 μm	
12:20	Lunch (Program Committee Meeting at the Argonne Guest House)	<b>17:00</b> MO-O-12	<b>N. Ginzburg</b> Four-Channel Planar FEM for High- Power mm-Wave Generation (Theoretical and Experimental Problems)	

# Tuesday, September 10

	Morning		Afternoon
	FEL Technologies – Part I	14:00	Poster Session II
8:30	D. Garzella (Invited)	-	
TU-O-01	Mirror Issues for FELs		FEL Technologies
9:10	S. Gottschalk		Storage Ring FELs
TU-O-02	Permanent Magnet Systems for FELs		
9:30	J. Pflueger		
TU-O-03	Radiation Exposure and Magnetic		
	Performance of the Undulator System		
	for the VUV FEL at the TESLA Test		
	Facility Phase I after Almost Three		
9:50	Years of Operation <b>S. Sasaki</b>		
7U-O-04	LCLS Prototype Undulator		
10:10-10-	P.4	15:30-16:	:00 Coffee Break
	FEL Technologies - Part II		Storage Ring FELs
	TEL Technologies – Fait II		Storage King PELS
10:40	R. Ischebeck (Invited)	16:00	V. Litvinenko (Invited)
TU-O-05	Study of the Transverse Coherence at	TU-O-09	New Results and Prospects for
	the TTF Free Electron Laser		Harmonic Generation in Storage Ring
11.00	M Cline	16.40	FELs
<b>11:20</b> TU-O-06	M. Shinn	<b>16:40</b> TU-O-10	M. Trovò (Invited)
10-0-00	Design of the Jefferson Lab IR Upgrade FEL Optical Cavity	10-0-10	The UV European FEL at ELETTRA at 1.5 GeV: Towards Compatibility of
	TEL Oplical Cablig		Storage Ring Operation for FEL and
			Synchrotron Radiation
11:40	A. Lumpkin	17:20	C. Thomas
TU-O-07	Evidence for Transverse Dependencies	TU-O-11	Storage Ring Free Electron Laser
	in COTR and Microbunching in a SASE		Dynamics: Longitudinal Detuning
	FEL		Study
12:00	P. Krejkic		
<b>12:00</b> TU-O-08	FEL R&D at SLAC's Short Pulse		
TU-O-08	FEL R&D at SLAC's Short Pulse Photon Source	10.05	
	FEL R&D at SLAC's Short Pulse	18:00	International Executive Committee Meeting

### Wednesday, September 11

	Morning		Afternoon
	Workshop Session I	14:00	Poster Session III
8:30	P. Maítre (Invited)		
WS-O-01	Ultrasensitive Gas Phase IR Photodissociation Spectroscopy by Using an FTICR Ion Trap Coupled to a Free Electron Laser		High-Brightness Electron Beams High-Gain, Short-Wavelength FELs
<b>9:10</b> WS-O-02	<b>J. Schulz</b> Coulomb Explosion of Rare Gas Clusters Irradiated by Intense VUV Pulses of a Free Electron Laser		
<b>9:30</b> WS-O-03	J. Krzywinski Interaction of Intense, Femtosecond Soft X-ray Pulses with Solids: Desorption, Ablation and Plasma Formation by TTF FEL SASE Radiation		
<b>9:50</b> WS-O-04	<b>K. Nomaru</b> Novel Process of Isotope Separation of Silicon by Use of IR FEL		
10:20-10-	40 Coffee Break	15:30-16:	00 Coffee Break
Hig	gh-Brightness Electron Beams	High	n-Gain, Short-Wavelength FELs
10:40	S. Russell (Invited)	16:00	C. Gerth
WE-O-01	Overview of High-Brightness, High- Average-Current Photoinjectors for FELs	WE-O-05	Spectral, Temporal, and Statistical Properties of a VUV FEL Operating in SASE Mode
11:20	X. Wang	16:20	H. Freund
WE-O-02	Femtoseconds Kiloampere High- Brightness Electron Beam	WE-O-06	Multi-Beam Free-Electron Lasers
<b>11:40</b> WE-O-03	<b>D. Janssen</b> First Operation of a Superconducting RF Electron Gun	<b>16:40</b> WE-O-07	<b>C. Limborg</b> Design Considerations of the LCLS
<b>12:00</b> WE-O-04	<b>Z. Huang</b> Theory and Simulation of CSR Microbunching in Bunch Compressors	<b>17:00</b> WE-O-08	<b>T. Shintake</b> Status of SPring-8 Compact SASE Source FEL Project
12:20	Lunch	17:20- 20:00	Prix Fixe Dinner at Guest House (Reservations required)
		20:00	Concert in APS Auditorium

### Thursday, September 12

	Morning		Morning
	Workshop Session II		
8:30	J. Kono (Invited)	8:30	Poster Session IV
WS-O-05	Ultrafast and Nonlinear Spectroscopy of Semiconductors with Small Energy Photons		
9:10	M. Hosaka		New Concepts and Proposals
WS-O-06	Pump/Probe Experiments with FEL and SR Pulses at UVSOR		Workshop Posters
9:30	B. Redlich		
WS-O-07	Resonant Desorption of Small Molecules from Surfaces		
9:50	H. Cruguel		
WS-O-08	Threshold Time-Resolved Surface		
	Magnetometry of Low-Dimensional		
10.10	Systems		
<b>10:10</b> WS-O-09	H. Dürr Forstorgoond Magnetism with the		
W3-0-09	Femtosecond Magnetism with the BESSY SASE FEL		
10:30-11:	10 Coffee Break	10:30-1	1:10 Coffee Break
N	lew Concepts and Proposals		
11:10	A. Renieri (Invited)	11:10	Poster Session IV (continued)
TH-O-01	Overview of Proposed VUV and Soft X- Ray Projects in the World		
<b>11:50</b> TH-O-02	<b>S. Werin</b> A Cascaded Optical Klystron on an Energy Recovery Linac – Race Track Microtron		New Concepts and Proposals Workshop Posters
	1 1101 011 011		
12:10	T. Zwart		
TH-O-03	<b>T. Zwart</b> The MIT Bates X-Ray Laser Project		
TH-O-03 <b>12:30</b>	<b>T. Zwart</b> The MIT Bates X-Ray Laser Project <b>J. Kuba</b>		
TH-O-03	<b>T. Zwart</b> The MIT Bates X-Ray Laser Project		
TH-O-03 <b>12:30</b>	<b>T. Zwart</b> The MIT Bates X-Ray Laser Project <b>J. Kuba</b> X-ray Optics Research for Free Electron Lasers: Study of Material Damage under Extreme Fluxes	y order a b	ox lunch to eat on the bus)
TH-O-03 <b>12:30</b> TH-O-04	<ul> <li>T. Zwart The MIT Bates X-Ray Laser Project</li> <li>J. Kuba</li> <li>X-ray Optics Research for Free Electron Lasers: Study of Material Damage under Extreme Fluxes</li> <li>Board buses to Chicago (you mage)</li> </ul>	-	ox lunch to eat on the bus)

# Friday, September 13

	Morning		Afternoon
	Workshop Session III		
8:30	K. Awazu (Invited)	14:30	Tour of Advanced Photon Source
WS-O-10	Status Report and Biomedical Applications of the Institute of FEL, Osaka University		
9:10	J. Hastings (Invited)		
WS-O-11	The LCLS: Short X-Ray Pulses Open a Window for New Scientific		
	Opportunities		
9:50	R. Austin		
WS-O-12	Two-Color Experiments in Protein		
	Dynamics		
10:10-10:	40 Coffee Break	_	
	Joint Session		
10:40	W. Eberhardt (Invited)		
FR-O-01	Science with Soft X-ray Free Electron Lasers		
11:10	G. Neil (Invited)		
FR-O-02	Status of the Jefferson Lab IR/UV High		
	Average Power Light Source		
<b>11:40</b>	J. Rossbach (Invited)		
FR-O-03	Demonstration of Gain Saturation and		
	Controlled Variation of Pulse Length at the TESLA Test Facility FEL		
12:10	J. Rocca (Invited)		
FR-O-04	Table-Top Soft X-Ray Lasers Based on Capillary Discharges		
12:30	Lunch (on your own)		