

Conference Program

Tuesday 28th July

15:30 – 22:30 Chartered Buses leaving MCI at 15:30; 18:30 and 22:30 MCI Airport
18:00 – 22:00 Registration & Reception Beach Art Museum

Wednesday 29th July

7:30 – 8:15 Breakfast Alumni Center
7:30 – 12:00 Registration Continues Alumni Center

Welcome (Chair: C. D. Lin) Alumni Center
8:15 – 8:30 Dr. Dean Zollman, Head, Department of Physics
Dr. Kirk Schulz, President, Kansas State University

Session 1 (Chair: F. Krausz) Alumni Center

8:30 – 9:05 R. Kienberger
Overview: Attosecond Physics – From Generation of Pulses to Applications on Solids

9:05 – 9:30 U. Keller
Laser Induced Tunneling in Less Than 12 Attoseconds: Instantaneous or Invalid Concept?

9:30 – 9:55 G. Sansone
Generation and Application of Attosecond Pulses for Time-Resolved Investigations of Atoms and Molecules

9:55 – 10:20 H. Mashiko
Temporal Characterization of Isolated Attosecond Pulse Generated With Double Optical Gating

10:20 – 10:50 Break

Session 2 (Chair: M. Nisoli) Alumni Center

10:50 – 11:25 K. Midorikawa
Overview: Generation of Sub-keV Harmonics and Isolated Attosecond Pulses by an IR-OPA Source

11:25 – 11:50 S. Leone
Transient Absorption X-Ray Probing in the Attosecond Limit

11:50 – 12:15 K. Yamanouchi
Chemistry in Attoseconds: Ultrafast Hydrogen Migration in Hydrocarbon Molecules in Intense Laser Fields

12:15 – 12:40 C. Nam
Transform-Limited Attosecond Pulse Generation

12:40 – 13:40 *Lunch* Alumni Center

Session 3 (Chair: Z. Chang) Alumni Center

13:50 – 15:30 Industrial and Sponsor Session (Sp01-06)
 J. Phys. B (13:50-14:00)
 Fastlite (14:00-14:15)
 Thales (14:15-14:30)
 Coherent (14:30-14:45)
 Femtolasers (14:45-15:00)
 Photonics (15:00-15:15)
 KM Labs (15:15-15:30)

Walk to Cardwell Hall

Session 4 Cardwell Hall

15:40 – 18:00 JRM Lab Tours (Chair: B. Washburn)

16:00 – 17:15 15-min Oral Presentations 1: 01-05 (Chair: B. Esry) Rm 102

16:00 – 17:15 15-min Oral Presentations 2: 06-10 (Chair: T. Morishita) Rm 145

16:15 – 17:30 *Refreshment* 1st floor hallway

17:45 – 18:15 Meet in Cardwell Hall Parking Lot to board buses for Konza Prairie

Konza Outing (Chair: Uwe Thumm)

18:15 – 19:30 Konza Prairie, Reception & BBQ Konza Prairie

19:30 – 19:45 Research at Konza Prairie (Loretta Johnson-KSU Biology)

19:45 – 20:45 Konza Guided Tour

20:00 – 21:00 Konza Hike

21:00 – 21:15 Bus returns to Hotels and Dormitory

Thursday 30th July

7:30 – 8:30 Breakfast Alumni Center

Session 5 (Chair: D. Villeneuve) Alumni Center

8:30 – 9:05 P. Corkum

Overview: Molecules and Attosecond Science

9:05 – 9:30 P. Salieres

Imaging Orbitals From the Attosecond Emission of Aligned Molecules

9:30 – 9:55 A.T. Le

Probing Fixed-in-Space Molecular Structures with High Harmonic Generation

9:55 – 10:20 J. Marangos

Optimising Fields for HHG

10:20 – 10:50 Break

Session 6 (Chair: G. Paulus) Alumni Center

10:50 – 11:25 J. Ye

Overview: Coherent Frequency Combs and Spectroscopy – From Far IR to XUV

11:25 – 11:50 F. X. Kärtner

Octave Spanning Ti:Sapphire Lasers and Carrier-Envelope Phase Control

11:50 – 12:15 Z. Wei

Carrier Envelope Phase Stabilized Sub-5fs Laser for Attosecond Pulse Generation

12:15 – 12:40 A. Ozawa

Current Progress in XUV Frequency Combs

Walk to KSU Student Union Student Union

12:40 – 13:40 Lunch Ballroom, 2nd floor

13:40 – 17:20 Poster Session T 2nd floor

14:00 – 15:00 10-min Oral T1 (Chair: Feng He) Big 12 room

14:00 – 15:00 10-min Oral T2 (Chair: J. Hernandez) Flint Hills room

16:00 – 17:20 Refreshment 2nd floor concourse

17:20 – 17:30 Return to Alumni Center

Session 7	(Chair: R. Jones)	Alumni Center
17:30 – 18:05	Y. Silberberg <i>Overview: Quantum Control with Shaped Pulses</i>	
18:05 – 18:30	J. Kuepper <i>Manipulating the Motion of Large Molecules: Translation, Rotation, and Conformer Selection</i>	
18:30 – 18:55	D. Umstadter <i>Ultra-Relativistic Electron Acceleration by a High-Power Ultrafast Laser</i>	
19:00 – 20:00	Dinner	Alumni Center
19:00 – 22:00	Bar Open	Alumni Center
20:00 – 22:00	Informal Discussion Poster Session continued Informal Discussion/Soccer game	Alumni Center Student Union Stadium

Friday 31st July

7:30 – 8:30	Breakfast	Alumni Center
Session 8	(Chair: A. Starace)	Alumni Center
8:30 – 9:05	A. L'Huillier <i>Overview: Attosecond Pulse Trains: Measurement, Control and Application</i>	
9:05 – 9:30	M. Vrakking <i>Attosecond Time Resolved Electron Dynamics in Molecules</i>	
9:30 – 9:55	P. Ranitovic <i>Control of Electron Dynamics in Light Systems Using Attosecond XUV and Femtosecond IR Radiation</i>	
9:55 – 10:20	M. Gaarde <i>High Harmonics and Attosecond Pulses as Diagnostics of Intensity Spikes in Laser Filamentation</i>	

10:20 – 10:50

Break

Session 9 (Chair: J. Nees)

Alumni Center

10:50 – 11:25 D. Neely

Overview: Recent Advances in Ultra Intense Laser Plasma Interactions

11:25 – 11:50 A. Staudte

Continuum Attosecond Electron Wavepackets

11:50 – 12:15 K. Hatsagortsyan

Relativistic High-Order Harmonic and Short Pulse Generation

12:15 – 12:40 H. Milchberg

High Power Filament Propagation in Atmospheric Quantum Wakes

Walk to Student Union

12:40 – 13:40

Lunch

Student Union

12:50 – 13:30

Atto Committee Meeting

Flint Hills room

13:40 – 17:20 Poster Session F

14:00 – 15:00 10-min Oral F1 (Chair: McKenna)

Big 12 room

14:00 – 15:00 10-min Oral F2 (Chair: ZJ Chen)

Flint Hills room

16:00 – 17:20

Refreshment

2nd floor concourse

17:20 – 17:30

Return to Alumni Center

Session 10 (Chair: D. Attwood)

Alumni Center

17:30 -18:05 J. Ullrich

Overview: Brilliant FEL Light: New Frontiers in AMO Physics

18:05 – 18:30 R. Santra

Multiphoton Physics in the X-Ray Domain

18:30 – 18:55 M. Drescher

Pushing the Temporal Resolution at an XUV-FEL: Tagging, Streaking, Seeding

19:00 – 20:00

Dinner

19:00 – 22:00

Bar Open

20:00 – 22:00 Informal Discussion

Alumni Center

Poster Session continued
Informal Discussion

Student Union
Stadium

Saturday 1st August

7:30 – 8:30 *Breakfast* Alumni Center

Session 11 (**Chair:** L. Madsen) Alumni Center

8:30 – 9:05 R. Li
Overview: Generation of Intense Few Cycle Laser Pulses for Driving Attosecond High Harmonic Emission

9:05 – 9:30 H. Kapteyn,
Coherent X-Rays From Ultrafast Lasers, and Applications – Attosecond Science Meets Nonlinear Optics

9:30 – 9:55 B. Fabre,
Phase-Resolved Attosecond Near-Threshold Photoionization of Molecular Nitrogen

9:55 – 10:20 L. DiMauro,
Intense Laser-Atom Physics in the Long Wavelength Limit

10:20 – 10:50 *Break*

Session 12

10:50 – 11:25 M. Wolf (**Chair:** I. Ben-Itzhak) Alumni Center
Overview: Ultrafast Dynamics in Solids and at Interfaces

11:25 – 11:50 D. Charalambidis
Intense Attosecond Pulses

11:50 – 12:15 J. Rost
Simultaneous Excitation of Equivalent Electrons to Non-Equilibrium with Attosecond Pulses

12:15 – 12:40 S. Cundiff
Two-Dimensional Fourier Transform Spectroscopy

Walk to Student Union

12:40 – 13:40 *Lunch* Student Union

13:40 – 18:20	Poster Session S	Student Union
14:00 – 15:00	10-min Oral Oral S1 (Chair: Chen, Shouyuan)	Big 12 Room
14:00 – 15:00	10-min Oral Oral S2 (Chair: K. Singh)	Flint Hills Room
16:00 – 17:20	<i>Refreshment</i>	2 nd floor concourse
18:20 – 18:30	<u>Remove Posters and return to Alumni Center</u>	
18:30 – 21:30	<i>Bar open</i>	Alumni Center
19:00 – 21:30	Banquet (Chair: Z. Chang)	Alumni Center

Sunday 2nd August

5:00	Bus to MCI—Have a good trip
10:00	Bus to MCI – Have a good trip