Conference Program

Tuesday 28th July

15:30 – 22:30  Charted 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)**  
Konza Prairie  
18:15 – 19:30  Konza Prairie, Reception & BBQ  
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  

Session 5  (Chair: D. Villeneuve)  
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)  
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  

12:40 – 13:40  Lunch  

13:40 – 17:20  Poster Session T  
14:00 – 15:00  10-min Oral T1 (Chair: Feng He)  
14:00 – 15:00  10-min Oral T2 (Chair: J. Hernandez)  

16:00 – 17:20  Refreshment  

17:20 – 17:30  Return to Alumni Center
Session 7  (Chair: R. Jones)  Alumni Center
17:30 – 18:05  Y. Silberberg  
**Overview:** Quantum Control with Shaped Pulses
18:05 – 18:30  J. Kuepper  
*Manipulating the Motion of Large Molecules: Translation, Rotation, and Conformer Selection*
18:30 – 18:55  D. Umstadter  
*Ultra-Relativistic Electron Acceleration by a High-Power Ultrafast Laser*

19:00 – 20:00  Dinner  Alumni Center
19:00 – 22:00  Bar Open  Alumni Center

20:00 – 22:00  Informal Discussion  Alumni Center  
Poster Session continued  Student Union  
Informal Discussion/Soccer game  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  
**Overview:** Attosecond Pulse Trains: Measurement, Control and Application
9:05 – 9:30  M. Vrakking  
*Attosecond Time Resolved Electron Dynamics in Molecules*
9:30 – 9:55  P. Ranitovic  
*Control of Electron Dynamics in Light Systems Using Attosecond XUV and Femtosecond IR Radiation*
9:55 – 10:20  M. Gaarde  
*High Harmonics and Attosecond Pulses as Diagnostics of Intensity Spikes in Laser Filamentation*
Session 9  (Chair: J. Nees)  
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*  
12:50 – 13:30  Atto Committee Meeting  

13:40 – 17:20  Poster Session F  
14:00 – 15:00  10-min Oral F1 (Chair: McKenna)  
14:00 – 15:00  10-min Oral F2 (Chair: ZJ Chen)  

16:00 – 17:20  *Refreshment*  
17:20 – 17:30  Return to Alumni Center  

Session 10  (Chair: D. Attwood)  
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
Saturday 1st August

7:30 – 8:30  Breakfast  

Session 11  
(Chair: L. Madsen)  
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)  
**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
14:00 – 15:00 10-min Oral Oral S1 (Chair: Chen, Shouyuan)
14:00 – 15:00 10-min Oral Oral S2 (Chair: K. Singh)
16:00 – 17:20 Refreshment

18:20 – 18:30 Remove Posters and return to Alumni Center

18:30 – 21:30 Bar open
19:00 – 21:30 Banquet (Chair: Z. Chang)

Sunday 2nd August

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