



MAX-PLANCK-GESELLSCHAFT

# Control of Ultrafast (Attosecond and Strong Field) Processes Using Structured Light

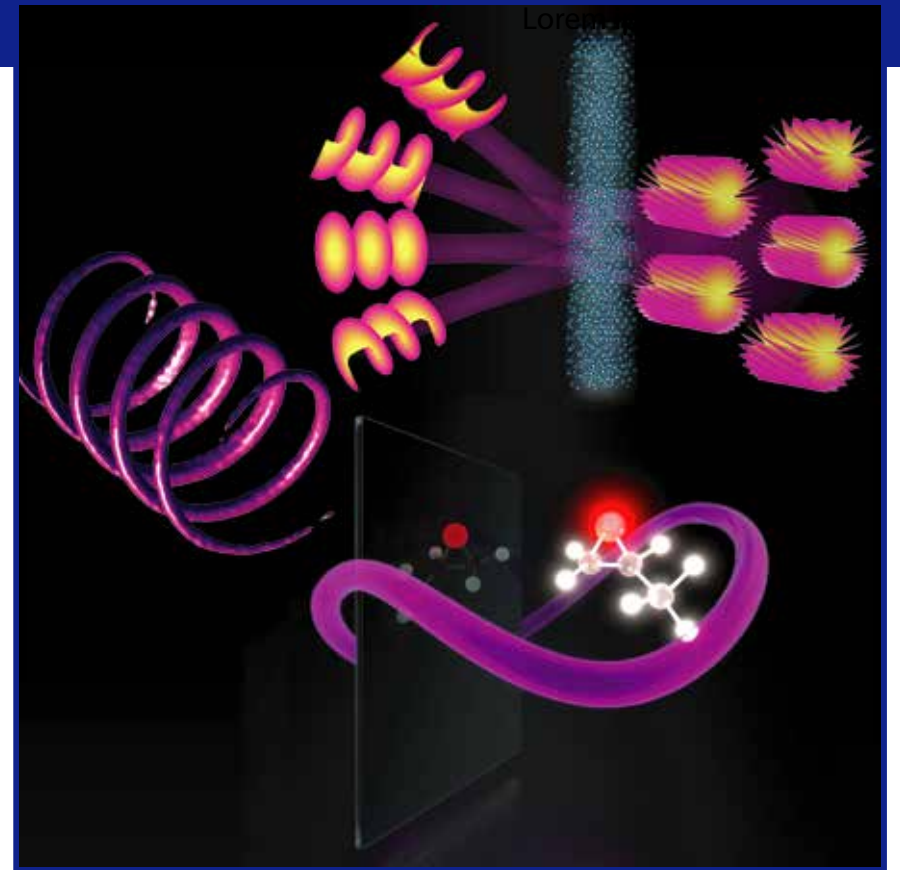
## International Seminar & Focus Workshop 29 June - 17 July 2020

(Focus Workshop week: 6 - 8 July 2020)

Attosecond and strong field physics are evolving in new directions, unified by the concept of lightwave electronics: from the generation of structured pulses with tailored angular momentum properties, the control of the enantiosensitive electronic response in chiral molecules, the study of non-linear properties of solid-state materials, to the generation and application of electron matter-wave vortices.

### Topics:

- ultrafast quantum dynamics with vector beams
- ultrafast lightwave electronics, valleytronics and spintronics
- chirality and topology in non-linear and ultrafast light-matter interaction
- generation, control, and application of electron matter-wave vortices
- high harmonic generation in solid-state materials and structured targets
- generation of attosecond pulses with tailored angular momentum properties
- attosecond spectroscopy of electron dynamics in solids
- ultrafast electronic and vibronic response of chiral molecules
- ultrafast magnetism driven by structured light beams
- generation of coherent structured x-rays



### Members of the scientific committee:

Jean Marcel Ngoko-Djiokap  
Lincoln, USA  
Katarzyna Krajewska  
Warszawa, Poland  
Maria Richter  
Berlin, Germany  
Laura Rego  
Salamanca, Spain

### Complete list of invited speakers:

see event web page  
[www.pks.mpg.de/cupusl20](http://www.pks.mpg.de/cupusl20)

### Scientific coordinators:

Carlos Hernández-García  
Salamanca, Spain  
Mikhail Yu. Ivanov  
Berlin, Germany

### Organisation:

Mandy Lochar  
MPIPKS Dresden

The conference will have a session dedicated to the memory and scientific contributions of Prof. Anthony Starace who was also instrumental in laying the foundation for this event.

Applications received before 15 March 2020 are considered preferentially.

Applications are welcome and should be made by using the application form on the event's web page. The number of attendees is limited. The registration fee for the international seminar and focus workshop is 140 Euro and should be paid by all participants. Costs for accommodation and meals will be covered by the Max Planck Institute. Limited funding is available to partially cover travel expenses.

### For further information please contact:

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