

## LCLS-II-HE "First Experiments" Meeting

Mon. Oct. 30

### Agenda

SLAC Redwood Building 48

Plenary (combined AMO & Gas-phase Chemistry, Biology, Quantum Materials)

8:00 AM *breakfast*

8:30 AM Welcome *Mike Dunne - SLAC*

8:40 AM LCLS-II-HE Science Opportunities Overview *Robert Schoenlein - SLAC*

9:05 AM *discussion*

9:20 AM LCLS-II-HE Facility Overview *Tor Raubenheimer - SLAC*

9:40 AM *discussion*

9:50 AM LCLS-II-HE Instrumentation *David Fritz - SLAC*

10:10 AM *discussion*

10:20 AM Workshop charge and objectives *Robert Schoenlein - SLAC*

10:30 AM *break*

#### *Three Parallel Meetings:*

10:50 AM **AMO & Gas-phase Chemistry:** B53-4002 Toluca *P. Bucksbaum, J. Cryan  
L. Young, & sub-topic leads*  
breakout sub-topic introductions, organization, open discussion

10:50 AM **Biology:** B48-112C/D *E. Lattman, S. Wakatsuki,  
S. Boutet & sub-topic leads*  
breakout sub-topic introductions, organization, open discussion

10:50 AM **Quantum Materials:** B48-112A/B *W.S. Lee, R. Schoenlein  
& sub-topic leads*  
breakout sub-topic introductions, organization, open discussion

12:20 PM *lunch*

Mon. *Parallel Sub-topic Meetings:*  
Oct. 30

#### 1:20 PM **AMO & Gas-phase Chemistry:**

Group1: **Fundamental atomic & molecular dynamics** B53-4002 Toluca

Group2: **Strong-field physics & nonlinear X-rays** B53-4006 Tulare

Group 3: **Chemical dynamics (imaging/scattering)** B53-4050 Yosemite

#### **Biology:**

Group 1: **Spontaneous (stochastic) dynamics and conformational heterogeneity** B48-112D

Group 2: **Triggered dynamics - pump/probe, rapid mixing** B48-224 Madrone

Group 3: **Advanced algorithms to provide new insight to biological function** B41 Napa

#### **Quantum Materials:**

Group1: **Correlated materials:** B48-112A

Group 2: **Low-dimensional materials and heterostructures** B48-112B

Group 3: **Exotic magnetism and spin phenomena** B48-112C

1:20 PM contributed talks and discussion (and sub-topic breakouts)

2:10 PM *discussion*

2:25 PM contributed talks and discussion (and sub-topic breakouts)

3:15 PM *break*

3:30 PM contributed talks and discussion (and sub-topic breakouts)

5:30 PM *break*

6:00 PM *dinner @ SLACafé (Building 53)*

7:00 PM preparation of draft "first experiments" for presentation & discussion on Tues.

*AMO: 53-4002, 4006, 4050*

*Biology: 53-3002, 3004, 3036*

*QM: 53-1350A, 53-1350B, 53-1036*

9:00 PM *adjourn for the day*

Tues. **LCLS-II-HE "First Experiments" Meeting**

Oct. 31 Tues. Oct. 31

**AMO & Gas-phase Chemistry:** B53-4002 Toluca

**Biology:** Rm. B48-112C/D

**Quantum Materials:** B48-112A/B

8:30 AM *breakfast*

9:00 AM Preliminary report-out presentations on "first experiments"

- AMO & Gas-phase Chemistry (all sub-groups): B53-4002 Toluca

- Biology (all sub-groups): Rm. B48-112C/D

- Quantum Materials (all sub-groups): B48-112A/B

9:30 AM *discussion*

9:45 AM Preliminary report-out presentations on "first experiments"

- AMO & Gas-phase Chemistry (all sub-groups): B53-4002 Toluca

- Biology (all sub-groups): Rm. B48-112C/D

- Quantum Materials (all sub-groups): B48-112A/B

10:15 AM *discussion*

10:30 AM *break*

10:45 AM *Writing - LCLS-II-HE "first experiments"*

**AMO & Gas-phase Chemistry:**

Group1: *Fundamental atomic & molecular dynamics* B53-4002 Toluca

Group2: *Strong-field physics & nonlinear X-rays* B53-4006 Tulare

Group 3: *Chemical dynamics (imaging/scattering)* B53-4050 Yosemite

**Biology:**

Group 1: *Spontaneous (stochastic) dynamics and conformational heterogeneity* B48-112D

Group 2: *Triggered dynamics - pump/probe, rapid mixing* B48-101 Cedar

Group 3: *Advanced algorithms to provide new insight to biological function* B41 Napa

**Quantum Materials:**

Group1: *Correlated materials:* B48-112A

Group 2: *Low-dimensional materials and heterostructures* B48-112B

Group 3: *Exotic magnetism and spin phenomena* B48-112C

1:00 PM *working lunch*

2:00 PM *adjourn*