

## LCLS Approved Experiments for Run 4, ~June 2011-October 2011

<u>Beam Line/ Instrument</u>	<u>Proposal #</u>	<u>Proposal Lead Spokesperson/PI</u>	<u>Approved Commissioning and User Experiments</u>	<u>LCLS Beam Line Scientist (Point of Contact)</u>
AMO	L277	PRINCE,KEVIN	Two-core-hole spectroscopy of BIOMolecules	Christoph Bostedt or John Bozek
AMO	L285	FEIFEL,RAIMUND	Disentangling Formation and Decay of Molecular Two-Site Double-Core-Hole States	Christoph Bostedt or John Bozek
AMO	L302	CAVALIERI,ADRIAN	X-ray pulse characterization by tandem streaking	Christoph Bostedt or John Bozek
AMO	L308	GUEHR,MARKUS	Nucleobase Photoprotection	Christoph Bostedt or John Bozek
AMO	L312	ROHRINGER,NINA	Stimulated non-linear x-ray Raman scattering	Christoph Bostedt or John Bozek
AMO	L313	CHAPMAN,HENRY	Water Window Imaging at LCLS	Christoph Bostedt or John Bozek
AMO	L328	MOELLER,THOMAS	Ultrafast ionization dynamics in single clusters	Christoph Bostedt or John Bozek
AMO	L338	EPP,SASCHA	Diffraction Femtosecond Photoelectron Holography: The "Molecular Movie"	Christoph Bostedt or John Bozek
CXI	L273	SPENCE,JOHN	Dynamics of electron transfer: PSI/ferredoxin	Sebastien Boutet or Garth Williams
CXI	L291	YACHANDRA,VITTAL	Structure and MEchanism of the Photosynthetic Mn4Ca Water-Splitting Complex: Simultaneous Crystallography and Spectroscopy	Sebastien Boutet or Garth Williams
CXI	L294	FROMME,PETRA	Molecular movies of water oxidation in Photosystem II.	Sebastien Boutet or Garth Williams
CXI	L352	ELMLUND,HANS	SINGLE-PARTICLE X-RAY DIFFRACTIVE IMAGING OF GOLD-LABELED RNA POLYMERASE II ELONGATION COMPLEXES	Sebastien Boutet or Garth Williams
CXI	L357	FELDKAMP,JAN	X-Ray Cross Correlation Analysis on Water	Sebastien Boutet or Garth Williams
CXI	L374	BOUTET,SEBASTIEN	Two-Color Hard X-ray Pump/Hard X-ray Probe	Sebastien Boutet or Garth Williams
SXR	L272	CAVALLERI,ANDREA	Probing the Fate of Static Stripes in LESCO 1/8 as a Transient Superconducting Phase is Formed	Bill Schlotter or Josh Turner
SXR	L317	GESSNER,OLIVER	Ultrafast pump-probe studies of photoinduced electronic dynamics in novel photovoltaic systems	Bill Schlotter or Josh Turner
SXR	L331	TOBEY,RAANAN	Terahertz Control of Magnetization in Multiferroic ErMn2O5	Bill Schlotter or Josh Turner
SXR	L332	LEE,RICHARD	Proposal to Perform the 1st High Energy Density Plasma Spectroscopic Pump/Probe Experiment	Bill Schlotter or Josh Turner
SXR	L336	ZHOU,SHUYUN	Revealing the ultrafast dynamics of orbital and spin orderings across the insulator to metal transition in PCMO manganites and the role of coherent phonons	Bill Schlotter or Josh Turner
SXR	L358	DURR,HERMANN	Single shot x-ray absorption spectroscopy of solids	Bill Schlotter or Josh Turner
SXR	L371	GAWELDA,WOJCIECH	Elucidating ultrafast spin changes in a femtosecond single-shot cross-correlator	Bill Schlotter or Josh Turner
XPP	L304	GRUEBEL,GERHARD	X-Ray Split-Pulse Experiments (II)	David Fritz or Marco Cammarata
XPP	L333	KRASNIQI,FATON	Ultrafast Dynamics in Highly Excited Semiconductors: Relaxation of Hot Carriers and Coherent Motion of Atoms under Space-Charge Fields	David Fritz or Marco Cammarata
XPP	L345	BRESSLER,CHRISTIAN	Femtosecond Spin State Changes – Implications for Photocatalysis	David Fritz or Marco Cammarata
XPP	L361	DAVID,CHRISTIAN	Diffraction-limited nanofocusing of hard X-FEL radiation using diAMOND-based Fresnel zone plates	David Fritz or Marco Cammarata
XPP	L362	REIS,DAVID	Time-and momentum resolved imaging of nonequilibrium phonons	David Fritz or Marco Cammarata
XPP	L367	REIS,DAVID	The role of lattice instabilities in ultrafast semiconductor to metal phase-transitions	David Fritz or Marco Cammarata