

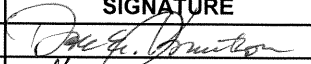
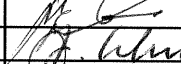



**LCLS Directorate - Work Scope Authorization**

<b>WBS No:</b>	4.1.1	<b>WBS Title:</b>	Division Management				
<b>Period of Performance:</b>	10/1/08 - 9/30/09	<b>Total Budget \$K:</b>	\$237	<b>Rev No:</b>	0	<b>Date Last Revised:</b>	1/23/09
<b>WBS Manager:</b>	Jochen Schneider	<b>Account Manager:</b>	John Arthur				

**Scope Definition:** This work includes effort and M&S required to manage the support of the LCLS Experimental Facilities Division including: administrative support, computer support & supplies, travel, office management, meetings.

**Profile of Fund Sources:** Experimental Operations

**Profile of Performing Orgs:** LCLS Experimental Facilities

<b>APPROVALS:</b>			
	<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>
LCLS Associate Laboratory Director	Dale Knutson		2-2-09
LCLS Deputy Associate Laboratory Director	Mark Reichenadter		2-2-09
WBS Manager	Jochen Schneider		01-30-09
Account Manager	John Arthur		1-30-09
LCLS Business Manager	Cindy Lowe		2-2-09

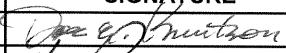

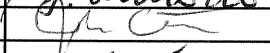
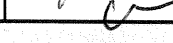

**LCLS Directorate - Work Scope Authorization**

<b>WBS No:</b>	4.1.2	<b>WBS Title:</b>	User Administration				
<b>Period of Performance:</b>	10/1/08 - 9/30/09	<b>Total Budget \$K:</b>	\$146	<b>Rev No:</b>	0	<b>Date Last Revised:</b>	1/23/09
<b>WBS Manager:</b>	Jochen Schneider		<b>Account Manager:</b>	John Arthur			

**Scope Definition:** This work includes effort and M&S required to manage the support of the LCLS user program including: user administration, proposal process support, experiment scheduling, user safety training, collection and distribution of LCLS user program performance metrics, user outreach, and management of user meetings.

**Profile of Fund Sources:** Experimental Operations

**Profile of Performing Orgs:** SSRL

<b>APPROVALS:</b>			
	<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>
LCLS Associate Laboratory Director	Dale Knutson		2-2-09
LCLS Deputy Associate Laboratory Director	Mark Reichenadter		2-2-09
WBS Manager	Jochen Schneider		01-30-09
Account Manager	John Arthur		1-30-09
LCLS Business Manager	Cindy Lowe		2-2-09

**LCLS Directorate - Work Scope Authorization**

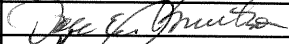

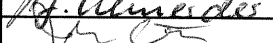
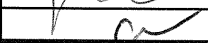

<b>WBS No:</b>	4.1.3	<b>WBS Title:</b>	Division Safety Office				
<b>Period of Performance:</b>	10/1/08 - 9/30/09	<b>Total Budget \$K:</b>	\$0	<b>Rev No:</b>	0	<b>Date Last Revised:</b>	1/23/09
<b>WBS Manager:</b>	Jochen Schneider		<b>Account Manager:</b>		John Arthur		

<b>Scope Definition:</b>	This work includes effort and M&S required for XFD ES&H activities including: radiation physics support, laser safety support, and ES&H support for LCLS users.						
--------------------------	---	--	--	--	--	--	--

<b>Profile of Fund Sources:</b>	Experimental Operations						
---------------------------------	-------------------------	--	--	--	--	--	--

<b>Profile of Performing Orgs:</b>	SSRL						
------------------------------------	------	--	--	--	--	--	--

**APPROVALS:**

	NAME	SIGNATURE	DATE
LCLS Associate Laboratory Director	Dale Knutson		2-2-09
LCLS Deputy Associate Laboratory Director	Mark Reichanadter		2-2-09
WBS Manager	Jochen Schneider		01-30-09
Account Manager	John Arthur		1-30-09
LCLS Business Manager	Cindy Lowe		2-2-09

**LCLS Directorate - Work Scope Authorization**

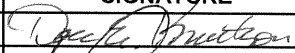


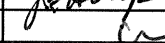

<b>WBS No:</b>	4.1.4	<b>WBS Title:</b>	Science Program Integration				
<b>Period of Performance:</b>	10/1/08 - 9/30/09	<b>Total Budget \$K:</b>	\$172	<b>Rev No:</b>	0	<b>Date Last Revised:</b>	1/23/09
<b>WBS Manager:</b>	Jochen Schneider		<b>Account Manager:</b>		Jerry Hastings		

**Scope Definition:** This work includes effort and M&S required for integration of the LCLS photon science program including: management, travel, meetings, matrix support for other SLAC divisions by XFD employees.

**Profile of Fund Sources:** Experimental Operations

**Profile of Performing Orgs:** LCLS Experimental Facilities

**APPROVALS:**

	NAME	SIGNATURE	DATE
LCLS Associate Laboratory Director	Dale Knutson		2-2-09
LCLS Deputy Associate Laboratory Director	Mark Reichenadter		2-2-09
WBS Manager	Jochen Schneider		01-30-09
Account Manager	Jerry Hastings		02/02/09
LCLS Business Manager	Cindy Lowe		2-2-09

**LCLS Directorate - Work Scope Authorization**

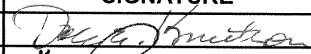
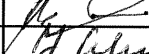
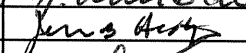


<b>WBS No:</b>	4.1.5	<b>WBS Title:</b>	In-house Research				
<b>Period of Performance:</b>	10/1/08 - 9/30/09	<b>Total Budget \$K:</b>	\$298	<b>Rev No:</b>	0	<b>Date Last Revised:</b>	1/23/09
<b>WBS Manager:</b>	Jochen Schneider		<b>Account Manager:</b>		Jerry Hastings		

**Scope Definition:** This work includes effort and M&S required for running the LCLS in-house research program including: management, travel, meetings, participating in in-house research experiments.

**Profile of Fund Sources:** Experimental Operations

**Profile of Performing Orgs:** LCLS Engineering and Physics, LCLS Experimental Facilities

**APPROVALS:**

	NAME	SIGNATURE	DATE
LCLS Associate Laboratory Director	Dale Knutson		2-2-09
LCLS Deputy Associate Laboratory Director	Mark Reichenadter		2-2-09
WBS Manager	Jochen Schneider		01-30-09
Account Manager	Jerry Hastings		02/02/09
LCLS Business Manager	Cindy Lowe		2-2-09

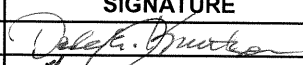
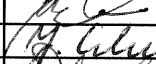



### LCLS Directorate - Work Scope Authorization

<b>WBS No:</b>	4.2.1	<b>WBS Title:</b>	Operations Support				
<b>Period of Performance:</b>	10/1/08 - 9/30/09	<b>Total Budget \$K:</b>	\$72	<b>Rev No:</b>	0	<b>Date Last Revised:</b>	1/23/09
<b>WBS Manager:</b>	Jochen Schneider		<b>Account Manager:</b>		John Arthur		

**Scope Definition:** This work includes effort and M&S required to manage the support of user operations in the LCLS photon experimental facilities including: duty operator support, minor modification to accommodate user requirements, and scheduled maintenance.

**Profile of Fund Sources:** Experimental Operations

**Profile of Performing Orgs:** LCLS Experimental Facilities

APPROVALS:			
	NAME	SIGNATURE	DATE
LCLS Associate Laboratory Director	Dale Knutson		2-2-09
LCLS Deputy Associate Laboratory Director	Mark Reichanadter		2-2-09
WBS Manager	Jochen Schneider		01-30-09
Account Manager	John Arthur		1-30-09
LCLS Business Manager	Cindy Lowe		2-2-09

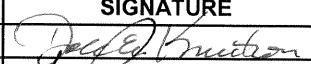
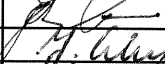

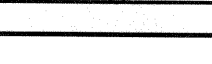

**LCLS Directorate - Work Scope Authorization**

<b>WBS No:</b>	4.2.2	<b>WBS Title:</b>	FEE				
<b>Period of Performance:</b>	10/1/08 - 9/30/09	<b>Total Budget \$K:</b>	\$133	<b>Rev No:</b>	0	<b>Date Last Revised:</b>	1/23/09
<b>WBS Manager:</b>	Jochen Schneider		<b>Account Manager:</b>		Hal Tompkins		

**Scope Definition:** This work includes effort and M&S required to support user operations in the Front End Enclosure including: instrument operations, minor modification to accommodate user requirements, and scheduled maintenance.

**Profile of Fund Sources:** Experimental Operations

**Profile of Performing Orgs:** LCLS Experimental Facilities, ETS Mechanical Design, ETS Power Conversion

<b>APPROVALS:</b>			
	<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>
LCLS Associate Laboratory Director	Dale Knutson		2-2-09
LCLS Deputy Associate Laboratory Director	Mark Reichenadter		2-2-09
WBS Manager	Jochen Schneider		01-30-09
Account Manager	Hal Tompkins		
LCLS Business Manager	Cindy Lowe		2-2-09

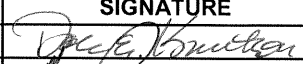
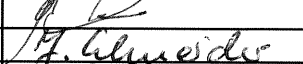
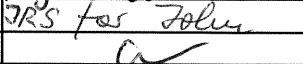


**LCLS Directorate - Work Scope Authorization**

<b>WBS No:</b>	4.2.3	<b>WBS Title:</b>	Hutch 1 Experiments				
<b>Period of Performance:</b>	10/1/08 - 9/30/09	<b>Total Budget \$K:</b>	\$51	<b>Rev No:</b>	0	<b>Date Last Revised:</b>	1/23/09
<b>WBS Manager:</b>	Jochen Schneider		<b>Account Manager:</b>		John Bozek		

**Scope Definition:** This work includes effort and M&S required to support user operations of the AMO instrument in Hutch 1 including: instrument operations, minor modification to accommodate user requirements, laser delivery to target, stock samples such as rare gases.

**Profile of Fund Sources:** Experimental Operations

**Profile of Performing Orgs:** ETS Controls, ETS Mechanical Design, ETS Mechanical Fabrication, ETS Metrology, ETS Power Conversion

<b>APPROVALS:</b>			
	<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>
LCLS Associate Laboratory Director	Dale Knutson		2-2-09
LCLS Deputy Associate Laboratory Director	Mark Reichenadter		2-2-09
WBS Manager	Jochen Schneider		01-30-09
Account Manager	John Bozek		02-02-09
LCLS Business Manager	Cindy Lowe		2-2-09



**LCLS Directorate - Work Scope Authorization**

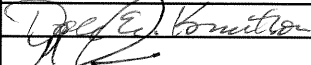
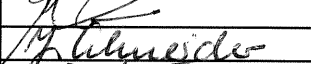



<b>WBS No:</b>	4.2.5	<b>WBS Title:</b>	Hutch 3 Experiments				
<b>Period of Performance:</b>	10/1/08 - 9/30/09	<b>Total Budget \$K:</b>	\$78	<b>Rev No:</b>	0	<b>Date Last Revised:</b>	1/23/09
<b>WBS Manager:</b>	Jochen Schneider		<b>Account Manager:</b>		David Fritz		

**Scope Definition:** This work includes effort and M&S required to support user operations of the XPP instrument in Hutch 3 including: instrument operations, minor modification to accommodate user requirements, laser delivery to target and scheduled maintenance.

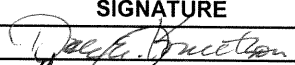
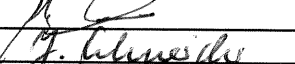



**Profile of Fund Sources:** Experimental Operations

**Profile of Performing Orgs:** LCLS Experimental Facilities

**APPROVALS:**

	NAME	SIGNATURE	DATE
LCLS Associate Laboratory Director	Dale Knutson		2-2-09
LCLS Deputy Associate Laboratory Director	Mark Reichenadter		2-2-09
WBS Manager	Jochen Schneider		01-30-09
Account Manager	David Fritz		02-02-09
LCLS Business Manager	Cindy Lowe		2-2-09

**LCLS Directorate - Work Scope Authorization**

<b>WBS No:</b>	4.2.7	<b>WBS Title:</b>	Hutch 4 experiments				
<b>Period of Performance:</b>	10/1/08 - 9/30/09	<b>Total Budget \$K:</b>	\$111	<b>Rev No:</b>	0	<b>Date Last Revised:</b>	1/23/09
<b>WBS Manager:</b>	Jochen Schneider	<b>Account Manager:</b>	Aymeric Robert				
<b>Scope Definition:</b>	This work includes effort and M&S required to support user operations in Hutch 4 including: instrument operations, minor modification to accommodate user requirements, and scheduled maintenance.						
<b>Profile of Fund Sources:</b>	Experimental Operations						
<b>Profile of Performing Orgs:</b>	LCLS Experimental Facilities						
<b>APPROVALS:</b>							
		<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>			
LCLS Associate Laboratory Director		Dale Knutson		2-2-09			
LCLS Deputy Associate Laboratory Director		Mark Reichanadter		2-2-08			
WBS Manager		Jochen Schneider		01-30-09			
Account Manager		Aymeric Robert		02/02/09			
LCLS Business Manager		Cindy Lowe		2-2-09			

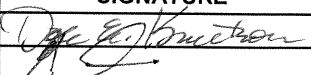
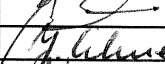
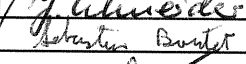
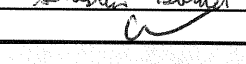

**LCLS Directorate - Work Scope Authorization**

<b>WBS No:</b>	4.2.8	<b>WBS Title:</b>	Hutch 5 Experiments				
<b>Period of Performance:</b>	10/1/08 - 9/30/09	<b>Total Budget \$K:</b>	\$111	<b>Rev No:</b>	0	<b>Date Last Revised:</b>	1/23/09
<b>WBS Manager:</b>	Jochen Schneider		<b>Account Manager:</b>		Sebastien Boutet		

**Scope Definition:** This work includes effort and M&S required to support user operations of the CXI instrument in Hutch 5 and in the XRT including: instrument operations, particle injector operations, minor modification to accommodate user requirements, laser delivery to target and scheduled maintenance.

**Profile of Fund Sources:** Experimental Operations

**Profile of Performing Orgs:** LCLS Experimental Facilities

<b>APPROVALS:</b>			
	<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>
LCLS Associate Laboratory Director	Dale Knutson		2-2-09
LCLS Deputy Associate Laboratory Director	Mark Reichanadter		2-2-09
WBS Manager	Jochen Schneider		01-30-09
Account Manager	Sebastien Boutet		01-30-09
LCLS Business Manager	Cindy Lowe		2-2-09

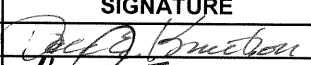
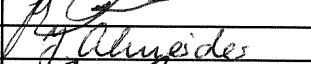



**LCLS Directorate - Work Scope Authorization**

<b>WBS No:</b>	4.2.10	<b>WBS Title:</b>	Laser Lab				
<b>Period of Performance:</b>	10/1/08 - 9/30/09	<b>Total Budget \$K:</b>	\$41	<b>Rev No:</b>	0	<b>Date Last Revised:</b>	1/23/09
<b>WBS Manager:</b>	Jochen Schneider		<b>Account Manager:</b>		Bill White		

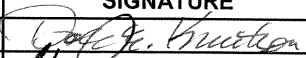
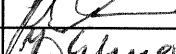
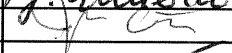


**Scope Definition:** This WBS covers the LCLS Laser Group work in support of XFD operations. IT includes the effort to diagnose, repair, and maintain the laser systems that are used as part of XFD experiments.

**Profile of Fund Sources:** Experimental Operations

**Profile of Performing Orgs:** #N/A

<b>APPROVALS:</b>			
	<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>
LCLS Associate Laboratory Director	Dale Knutson		2-2-09
LCLS Deputy Associate Laboratory Director	Mark Reichanadter		2-2-09
WBS Manager	Jochen Schneider		01-30-09
Account Manager	Bill White		2-2-09
LCLS Business Manager	Cindy Lowe		2-2-09

**LCLS Directorate - Work Scope Authorization**

<b>WBS No:</b>	4.4.1	<b>WBS Title:</b>	Technical developments management				
<b>Period of Performance:</b>	10/1/08 - 9/30/09	<b>Total Budget \$K:</b>	\$14	<b>Rev No:</b>	0	<b>Date Last Revised:</b>	1/23/09
<b>WBS Manager:</b>	Jochen Schneider	<b>Account Manager:</b>	John Arthur				
<b>Scope Definition:</b>	This WBS covers the staffing and supplies costs for management of the technical development activities of the Experimental Facilities Division.						
<b>Profile of Fund Sources:</b>	Experimental Operations						
<b>Profile of Performing Orgs:</b>	LCLS Experimental Facilities						
<b>APPROVALS:</b>							
		<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>			
LCLS Associate Laboratory Director		Dale Knutson		2-2-09			
LCLS Deputy Associate Laboratory Director		Mark Reichanadter		2-2-09			
WBS Manager		Jochen Schneider		01-30-09			
Account Manager		John Arthur		1-30-09			
LCLS Business Manager		Cindy Lowe		2-2-09			

**LCLS Directorate - Work Scope Authorization**






<b>WBS No:</b>	4.4.2	<b>WBS Title:</b>	XFD major performance upgrades R&D				
<b>Period of Performance:</b>	10/1/08 - 9/30/09	<b>Total Budget \$K:</b>	\$91	<b>Rev No:</b>	0	<b>Date Last Revised:</b>	1/23/09
<b>WBS Manager:</b>	Jochen Schneider	<b>Account Manager:</b>	John Arthur				

**Scope Definition:** This work includes effort and M&S required for R&D for XFD instrumentation upgrades including: concept design and review, prototype design & engineering, testing, analysis.

**Profile of Fund Sources:** Experimental Operations

**Profile of Performing Orgs:** LCLS Experimental Facilities

**APPROVALS:**

	NAME	SIGNATURE	DATE
LCLS Associate Laboratory Director	Dale Knutson		2-2-09
LCLS Deputy Associate Laboratory Director	Mark Reichanader		2-2-09
WBS Manager	Jochen Schneider		01-30-09
Account Manager	John Arthur		1-30-09
LCLS Business Manager	Cindy Lowe		2-2-09

**LCLS Directorate - Work Scope Authorization**

<b>WBS No:</b>	4.4.3	<b>WBS Title:</b>	XFD major performance upgrades implementation				
<b>Period of Performance:</b>	10/1/08 - 9/30/09	<b>Total Budget \$K:</b>	\$36	<b>Rev No:</b>	0	<b>Date Last Revised:</b>	1/23/09
<b>WBS Manager:</b>	Jochen Schneider		<b>Account Manager:</b>		John Arthur		

**Scope Definition:** This work includes effort and M&S required to implement XFD instrumentation upgrades including: engineering, assembly, installation, testing, and commissioning.

**Profile of Fund Sources:** Experimental Operations

**Profile of Performing Orgs:** LCLS Experimental Facilities

**APPROVALS:**

	NAME	SIGNATURE	DATE
LCLS Associate Laboratory Director	Dale Knutson	<i>Dale Knutson</i>	2-2-09
LCLS Deputy Associate Laboratory Director	Mark Reichanadter	<i>M. Reichanadter</i>	2-2-09
WBS Manager	Jochen Schneider	<i>J. Schneider</i>	01-30-09
Account Manager	John Arthur	<i>John Arthur</i>	1-30-09
LCLS Business Manager	Cindy Lowe	<i>C. Lowe</i>	2-2-09

**LCLS Directorate - Work Scope Authorization**

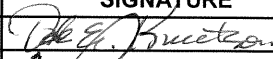

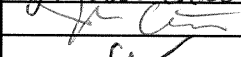


<b>WBS No:</b>	4.4.4	<b>WBS Title:</b>	Strategic project support				
<b>Period of Performance:</b>	10/1/08 - 9/30/09	<b>Total Budget \$K:</b>	\$144	<b>Rev No:</b>	0	<b>Date Last Revised:</b>	1/23/09
<b>WBS Manager:</b>	Jochen Schneider		<b>Account Manager:</b>		John Arthur		

**Scope Definition:** This work includes effort and M&S required for XFD support of LCLS strategic projects, including: concept design and review, science scope planning and management, science requirements preparation and review, technical oversight and review, R&D related to LCLS strategic projects.

**Profile of Fund Sources:** Experimental Operations

**Profile of Performing Orgs:** LCLS Experimental Facilities

**APPROVALS:**

	NAME	SIGNATURE	DATE
LCLS Associate Laboratory Director	Dale Knutson		2-2-09
LCLS Deputy Associate Laboratory Director	Mark Reichenadter		2-2-09
WBS Manager	Jochen Schneider		01-30-09
Account Manager	John Arthur		1-30-09
LCLS Business Manager	Cindy Lowe		2-2-09



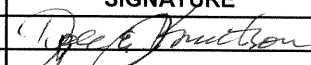
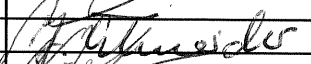
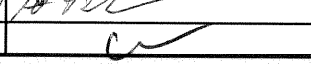


**LCLS Directorate - Work Scope Authorization**

<b>WBS No:</b>	4.4.5	<b>WBS Title:</b>	XFD Detector Development				
<b>Period of Performance:</b>	10/1/08 - 9/30/09	<b>Total Budget \$K:</b>	\$150	<b>Rev No:</b>	0	<b>Date Last Revised:</b>	1/23/09
<b>WBS Manager:</b>	Jochen Schneider	<b>Account Manager:</b>	Niels van Bakel				

**Scope Definition:** This work includes effort and M&S required to support development of advanced 2D X-ray detectors, advanced detector R&D and development of application software for readout and control of detectors.

**Profile of Fund Sources:** Experimental Operations

**Profile of Performing Orgs:** LCLS Experimental Facilities

<b>APPROVALS:</b>			
	<b>NAME</b>	<b>SIGNATURE</b>	<b>DATE</b>
LCLS Associate Laboratory Director	Dale Knutson		2-2-09
LCLS Deputy Associate Laboratory Director	Mark Reichenadter		2-2-09
WBS Manager	Jochen Schneider		2-2-09
Account Manager	Niels van Bakel		2-2-2009
LCLS Business Manager	Cindy Lowe		2-2-09