



MagLab-OSF Integration Tools

F. F. Balakirev, C. B. Bailey, L. L. Balakireva, LANL



Acquire Pulse

Red Pitaya 118

Select Item...

Select Item...

ARM Disarm ARMED

Pulse File C:\Dat...\101121\p010_101121.tdms

Monitor

RP Lockin 118

Spectrum Recorder

Select Item...

Start Stop Pause OFF

Monitor File

MagX List.vi

Selection P17518-E008-PF Select

Experiment ID	Dates	Experiment title	Proposal title	PI
P19631-E001-PF	08/02/21-08/07/21	Quantum Oscillations of CePdAl	Magnetically frustrated f-electron intermetallics	Filip Ronning
P19544-E001-PF	08/02/21-08/05/21	Magnetoresistance measurements on BaMnSb2 under st	Studies of exotic quantum phenomena near the quantum limit in	Zhiqiang Mao
P19544-E001-PF	07/28/21-07/31/21	Magnetoresistance measurements on BaMnSb2 under st	Studies of exotic quantum phenomena near the quantum limit in	Zhiqiang Mao
P17518-E008-PF	07/26/21-07/31/21	High-field transport measurements on Ba122+BHO and	Anisotropic electrical transport in pinning-enhanced Fe-based an	Jens Haenisch
P17849-E008-PF	07/26/21-07/31/21	Shubnikov de Haas oscillation of two-dimensional electr	Shubnikov de Haas oscillation of two dimensional electron gases	Qi Li
P19530-E001-PF	07/12/21-07/17/21	Magnetoelastic and magnetocaloric properties of a topo	Magnetoelastic and magnetocaloric properties of a topological su	Rico Schoenemar
P19540-E001-PF	07/12/21-07/17/21	High Field Quantum Oscillation Study of Bulk van der W.	High Field Studies of Novel Layered Materials	Joseph Checkelsk
P19168-E002-PF	07/05/21-07/17/21	THz spectroscopy of electron doped cuprates in pulsed n	THz spectroscopy of cuprate superconductors in pulsed magnetic	Kirk Post
P19528-E003-PF	07/06/21-07/09/21	Mapping the Fermi surfaces in Kondo insulator YbIr3Si7	Search for novel electronic and magnetic state in ultraintensive m	Lu Li
P17751-E009-PF	06/30/21-07/03/21	Quantum oscillation in heavy fermion system at high ma	Quantum oscillation in heavy fermion system at high magnetic fi	Takao Ebihara
P19528-E003-PF	06/29/21-07/03/21	Mapping the Fermi surfaces in Kondo insulator YbIr3Si7	Search for novel electronic and magnetic state in ultraintensive m	Lu Li
P17682-E014-PF	06/28/21-07/03/21	Probing Topology in isos		
P17875-E002-PF	06/28/21-07/01/21	Field and Strain Tuning G		
P17875-E002-PF	06/25/21-06/26/21	Field and Strain Tuning G		

OSFHOME

Test Project Files Wiki Analytics Registrations Contributors Add-ons Settings

test8.tdms (Version: 1)

Check out Delete Download View Revisions

Test Project

- OSF Storage (United States)
 - 1200px-Matterhorn_from_Zermatt.jpg
 - resume.pdf
 - test14.tdms
 - test2.tdms
 - test6.tdms
 - test8.tdms**

Tags

Add a tag to enhance discoverability

File Contents

File Metadata

- name: p008_100620

Group p

Channel Field	
wf_start_time	1903-12-31T23:59:59.990000
wf_start_offset	0
wf_increment	1e-06
wf_samples	1.1e+05
Channel_name	Field

Configuration

```
[Configuration] Configuration.Pre-trigger duration = "0.010000000000"
Configuration.Post-trigger duration = "0.100000000000"
Configuration.Rate = "1000000.0000"
Configuration.Ranges = "10.000000000 10.000000000"
Configuration.Re-name channels = "2"
Configuration.Re-name channels 0 = "Bdot"
Configuration.Re-name channels 1 = "Idot"
Configuration.Active channels = "2,1"
Configuration.External clock =
```

Data Plot

Data Table

	Field	V2 X1 (Resampled)	I Y1 (Resampled)	Idot	Field (Resampled)
0	9.653819e-07	0.624625	-0.005229	-0.001221	1.921389e-06
1	1.930764e-06	0.624624	-0.005228	-0.002441	2.886770e-06
2	2.896146e-06	0.624624	-0.005227	-0.001221	4.861944e-06
3	4.881222e-06	0.624624	-0.005225	-0.002441	9.371498e-06
4	9.415532e-06	0.624623	-0.005224	-0.002441	8.856852e-06



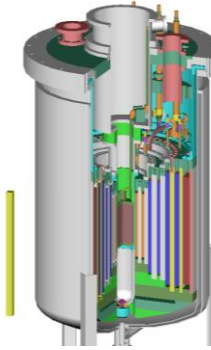
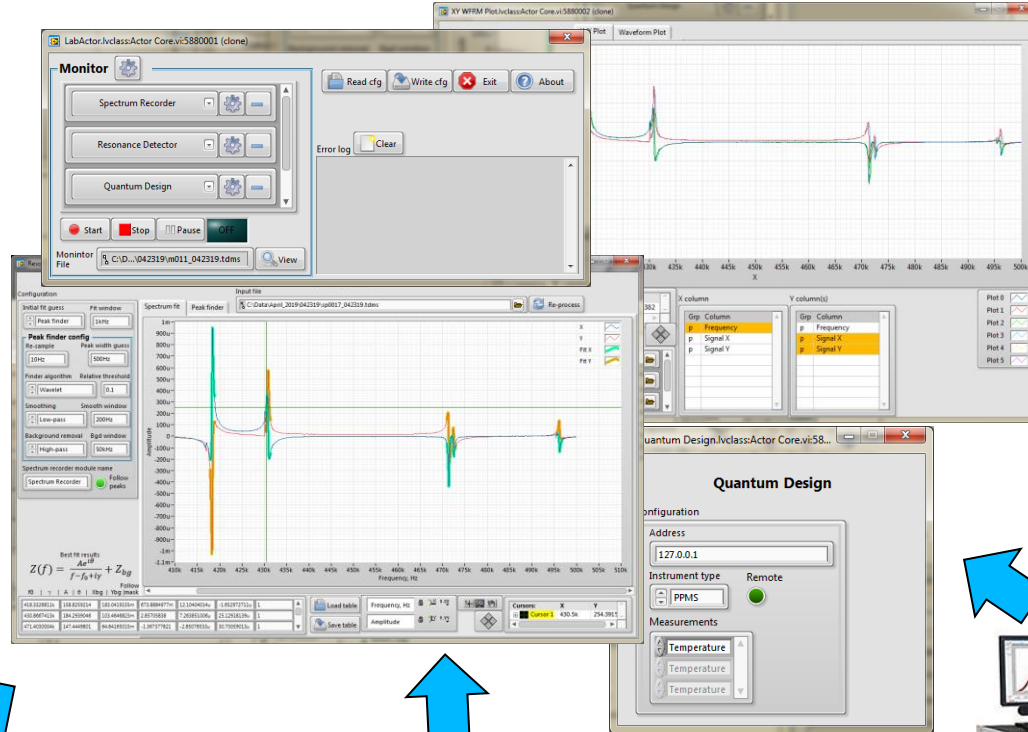
High Magnetic Field Science Toolset

Data Acquisition, Annotation, and Presentation Framework



NI LabVIEW Actor Framework (LabActor)

<https://github.com/ffb-LANL/High-Magnetic-Field-Science-Toolset>



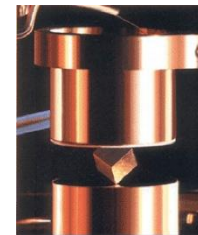
MAGNET LAB
NATIONAL HIGH MAGNETIC FIELD LABORATORY
FLORIDA STATE UNIVERSITY · LOS ALAMOS NATIONAL LABORATORY · UNIVERSITY OF FLORIDA

USER PROGRAMS

Experiment P17644-E002-PF

Title: High field superconducting phase-diagram of sulphur hydride/deuteride
 Facility: Pulsed Field
 Discipline: Condensed Matter Physics
 Status: Completed
 Is Rapid Access: False
 Date Submitted: 8/2/2018
 Proposal: High field superconducting phase-diagram of sulphur hydride/deuteride
 Decision: Approved - 8/15/2018

Experiment Participants		
Role		Name(s)
Submitter		Fedor Balakirev (S)
PI		Mikhail Erements (S)
		Luis Balicas (S)
		Fedor Balakirev (S)
Collaborator(s)		Laura Greene (S)
		Shirin Mozaffari (P)
		Dan Sun (P)



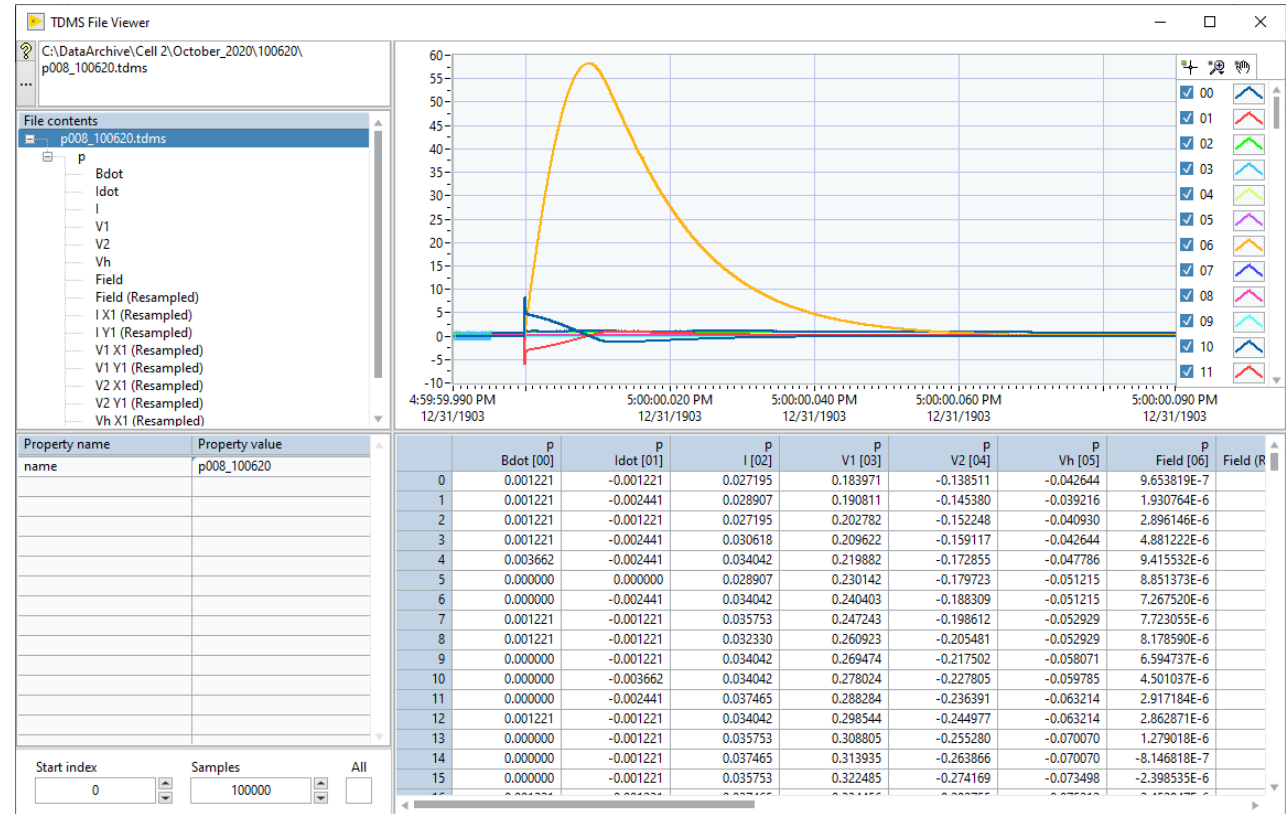
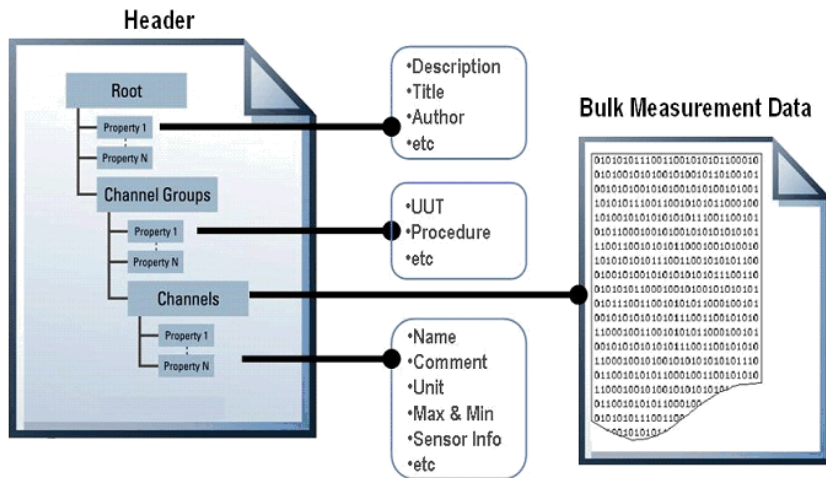


FAIR-Ready Metadata-Rich Data Formats

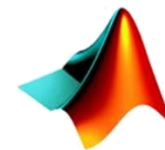
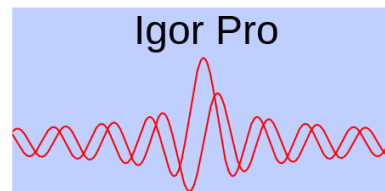
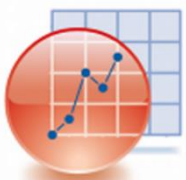
Technical Data Management Solution
and Hierarchical Data Format 5



Industry-standard **Interoperable** hierarchical data file formats with embedded rich metadata



Interoperability



MATLAB





Hierarchical Data Formats at MagLab

The screenshot displays two overlapping LabVIEW TDMS Properties dialog boxes. The background dialog shows a waveform plot with a y-axis ranging from 1 to 1.2 and several colored peaks. The foreground dialog shows the following property list:

Property name	Property value
Configuration	[Configuration] Configuration.Pre-trigger duration = "0.00100000000000" Configuration.Post-trigger duration = "0.00100000000000" Configuration.Rate = "125000000.00" Configuration.Ranges = "<size(s)=1> 1.000000000000" Configuration.Re-name channels.<size(s)> = "0" Configuration.Active channels = "0" Configuration.External clock = "FALSE"
Lockin parameters.DDS	true
Lockin parameters.DDS clock	1.250000E+8
Lockin parameters.DDS modulus	15120
Lockin parameters.Frequency	8267.195767
Lockin parameters.Frequency word	1
Lockin parameters.Phase	436.395833
Lockin parameters.Phase word	14563
Lockin parameters.Points per sine wave	15120
Lockin parameters.Synchronous	true
NI_ArrayColumn	0
NI_ChannelLength	248056
NI_ChannelName	Red Pitaya 118 ai0
NI_DataType	10
NI_Number_Of_Scales	1
NI_Scale[0]_Linear_Input_Source	4294967295
NI_Scale[0]_Linear_Slope	0.000142
NI_Scale[0]_Linear_Y_Intercept	-0.031292
NI_Scale[0]_Scale_Type	Linear
NI_Scaling_Status	scaled
name	Red Pitaya 118 ai0
wf_increment	8.000000E-9
wf_start_time	12/31/1903 16:59:59.999

Captured data interspersed with relevant metadata



MagLab User Program Metadata



SUN	MON	TUE	WED	THU	FRI	SAT
	2	3	4	5	6	7
	P19631-E001-PF; PI: Filip Ronning; Support: Neil Harrison, Vivien Zapf P19544-E001-PF; PI: Zhiqiang Mao; Support: Ross McD					
8	9	10	11	12	13	14
	P19540-E002-PF; PI: Joseph Checkelsky; Support: Mun Chan P19631-E002-PF; PI: Filip Ronning; Support: Vivien Zapf, Neil Harrison P19635-E001-PF; PI: James Wampler; Support: Vivien Zapf, Minseong Lee					
15	16	17	18	19	20	21
	P19540-E002-PF; PI: Joseph Checkelsky; Support: Mun Chan P19621-E001-PF; PI: Cui-Zu Chang; Support: Laurel Winter					
22	23	24	25	26	27	28
	P19528-E007-PF; PI: Lu Li; Support: John Singleton P19634-E001-PF; PI: James Wampler; Support: Vivien Zapf, Minseong Lee					
29	30	31	Sep 1	2	3	4
	P19131-E006-PF; PI: Neil Harrison; Support: Mun Chan, Neil Harrison P19528-E007-PF; PI: Lu Li; Support: John Singleton					

MagLab User Program Calendar

MAGNET LAB

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Experiment Participants	
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Collaborator(s)	Luis Balicas (S)
	Fedor Balakirev (S)
	Laura Greene (S)
	Shirin Mozaffari (P)
	Dan Sun (P)

MagLab User Project Portal



MagLab Project Metadata Hub



Calendar view for August 2021. Events include:

- Aug 1: P19631-E001-PF; PI: Filip Ronning; Support: Neil Harrison, Vivien Zapf
- Aug 1: P19544-E001-PF; PI: Zhiqiang Mao; Support: Ross McD
- Aug 9: P19540-E002-PF; PI: Joseph Checkelsky; Support: Mun Chan
- Aug 9: P19631-E002-PF; PI: Filip Ronning; Support: Vivien Zapf, Neil Harrison
- Aug 9: P19635-E001-PF; PI: James Wampler; Support: Vivien Zapf, Minseong Lee
- Aug 16: P19540-E002-PF; PI: Joseph Checkelsky; Support: Mun Chan
- Aug 16: P19621-E001-PF; PI: Cui-Zu Chang; Support: Laurel Winter
- Aug 23: P19528-E007-PF; PI: Lu Li; Support: John Singleton
- Aug 23: P19634-E001-PF; PI: James Wampler; Support: Vivien Zapf, Minseong Lee
- Aug 30: P19131-E006-PF; PI: Neil Harrison; Support: Mun Chan, Neil Harrison
- Aug 30: P19528-E007-PF; PI: Lu Li; Support: John Singleton

MagLab User Program Calendar

MagLab Metadata Hub

Proposal ID	Experiment ID	PI	Date Start	Magnet System	Experiment Title	Station	Support	ID	Link	Edit
P19528	P19528-E003-PF	Lu Li	2021-07-06	73 T Multi shot (Duplex)	Mapping the Fermi surfaces in Kondo insulator YbIr3Si7	Cell_294	John Singleton	40220	GotoFSU	edit
P19528	P19528-E007-PF	Lu Li	2021-08-30	65 T Multi shot 25 mS (Short Pulse)	tuning fork magnetometry of Kondo insulator YbB12 in 65 T pulsed magnetic fields	Cell_1	John Singleton	40619	GotoFSU	edit
P19528	P19528-E008-PF	Lu Li	2021-10-18	65 T Multi shot 25 mS (Short Pulse)	tuning fork magnetometry of Kondo insulator YbB12 in 65 T pulsed magnetic fields	Cell_1	John Singleton	40927	GotoFSU	edit
P19528	P19528-E009-PF	Lu Li	2021-11-01	73 T Multi shot (Duplex)	Mapping the Fermi surfaces in Kondo insulator YbIr3Si7	Cell_294	John Singleton	40928	GotoFSU	edit
P19528	P19528-E010-PF	Lu Li	2021-10-25	65 T Multi shot 25 mS (Short Pulse)	Mapping the Fermi surfaces in Kondo insulator YbIr3Si7	Cell_1	John Singleton	40929	GotoFSU	edit
P19533	P19533-E002-PF	Matthew Coak	2022-01-17	65 T Multi shot 25 mS (Short Pulse)	Fermiology of 2D magnetic vdW metal Fe3GeTe2	Cell_1	John Singleton	40950	GotoFSU	edit
P17906	P17906-E008-PF	Minhyea Lee	2021-12-06	65 T Multi shot 25 mS (Short Pulse)	Investigation on unusual magnetic responses in quantum magnets	Cell_4	Mun Chan	40622	GotoFSU	edit
P19534	P19534-E001-PF	Mun Chan	2021-09-06	65 T Multi shot 25 mS (Short Pulse)	Pulsed magnetic field study of infinite layer cuprates.	Cell_3	Mun Chan, Boris Maiorov	40236	GotoFSU	edit
P19534	P19534-E002-PF	Mun Chan	2022-01-24	65 T Multi shot 25 mS (Short Pulse)	Development of Resonant Ultrasound Spectroscopy for Pulsed Magnetic Field Magnets	Cell_3	Mun Chan, Boris Maiorov	41025	GotoFSU	edit
P19131	P19131-E003-PF	Neil Harrison	2021-09-06	65 T Multi shot 25 mS	Nature of the field driven insulator to metal transition in the Kondo insulator	Cell_2	Mun Chan, Satya	37811	GotoFSU	edit

Apache Wicket frontend, Jersey (jax-rs) for rest API, SQLite database



MagLab Project Metadata Hub Integration



LabActor.lvclass:Actor Core.vi:5880001 (clone)

Acquire Pulse

Red Pitaya 118
Select a module to include in measurements

Select Item...
Select Item...
Select Item...

ARM Disarm ARMED 0

Pulse File C:\Dat...\101121\p017_101121.tdms View

Monitor

RP Lockin 118
Select Item...
Select Item...

Start Stop Pause OFF

Monitor File

Process Pulse

Select Item...
Select Item...
Select Item...

Read cfg Write cfg Exit Error ?

Log Record

Project title
Search for novel electronic and magnetic state in ultraintensive magnetic fields

Experiment title
Mapping the Fermi surfaces in Kondo insulator YbIr3Si7

Experiment P19528-E010-PF Change
Principal Investigator Lu Li
OSF user Fedor Balakirev

Sync to OSF

https://magx.lanl.gov/cal?2

magx.lanl.gov/cal?2

NATIONAL HIGH MAGNETIC FIELD LABORATORY

MagLab Metadata Hub

Home

Proposal ID	Experiment ID	PI	Date Start	Magnet System	Experiment Title	Station	Support	ID	Link	Edit
P19528	P19528-E003-PF	Lu Li	2021-07-06	73 T Multi shot (Duplex)	Mapping the Fermi surfaces in Kondo insulator YbIr3Si7	Cell_294	John Singleton	40220	GotoFSU	edit
P19528	P19528-E007-PF	Lu Li	2021-08-30	65 T Multi shot 25 mS (Short Pulse)	tuning fork magnetometry of Kondo insulator YbB12 in 65 T pulsed magnetic fields	Cell_1	John Singleton	40619	GotoFSU	edit
P19528	P19528-E008-PF	Lu Li	2021-10-18	65 T Multi shot 25 mS (Short Pulse)	tuning fork magnetometry of Kondo insulator YbB12 in 65 T pulsed magnetic fields	Cell_1	John Singleton	40927	GotoFSU	edit
P19528	P19528-E009-PF	Lu Li	2021-11-01	73 T Multi shot (Duplex)	Mapping the Fermi surfaces in Kondo insulator YbIr3Si7	Cell_294	John Singleton	40928	GotoFSU	edit
P19528	P19528-E010-PF	Lu Li	2021-10-25	65 T Multi shot 25 mS (Short Pulse)	Mapping the Fermi surfaces in Kondo insulator YbIr3Si7	Cell_1	John Singleton	40929	GotoFSU	edit
P19533	P19533-E002-PF	Matthew Coak	2022-01-17	65 T Multi shot 25 mS (Short Pulse)	Fermiology of 2D magnetic vdW metal Fe3GeTe2	Cell_1	John Singleton	40950	GotoFSU	edit
P17906	P17906-E008-PF	Minhyea Lee	2021-12-06	65 T Multi shot 25 mS (Short Pulse)	Investigation on unusual magnetic responses in quantum magnets	Cell_4	Mun Chan	40622	GotoFSU	edit
P19534	P19534-E001-PF	Mun Chan	2021-09-06	65 T Multi shot 25 mS (Short Pulse)	Pulsed magnetic field study of infinite layer cuprates.	Cell_3	Mun Chan, Boris Majorov	40236	GotoFSU	edit
P19534	P19534-E002-PF	Mun Chan	2022-01-24	65 T Multi shot 25 mS (Short Pulse)	Development of Resonant Ultrasound Spectroscopy for Pulsed Magnetic Field Magnets	Cell_3	Mun Chan, Boris Majorov	41025	GotoFSU	edit
P19131	P19131-E003-PF	Neil Harrison	2021-09-06	65 T Multi shot 25 mS	Nature of the field driven insulator to metal transition in the Kondo insulator	Cell_2	Mun Chan, Satya	37811	GotoFSU	edit

MagLab Research Software Framework (LabActor)

Apache Wicket frontend, Jersey (jax-rs) for rest API, SQLite database



MagLab Project Metadata Hub Integration



Experiment selection tool

The screenshot displays the LabActor software interface. On the left, there are control panels for 'Acquire Pulse' and 'Monitor'. The 'Acquire Pulse' panel includes a dropdown menu for 'Red Pitaya 118', a 'Select Item...' button, and 'ARM', 'Disarm', and 'ARMED' buttons. The 'Monitor' panel includes a dropdown menu for 'RP Lockin 118', 'Select Item...' buttons, and 'Start', 'Stop', 'Pause', and 'OFF' buttons. A 'Pulse File' field shows the path 'C:\Dat...\101121\p017_101121.tdms'. The 'Monitor File' field is empty. The 'MagX List.vi' window is open, showing a table of experiments. The table has columns for 'Experiment ID', 'Dates', 'Experiment title', 'Proposal title', and 'PI'. The row for 'P17518-E008-PF' is highlighted in yellow. Below the table, there are fields for 'Project title', 'Experiment title', 'Experiment', 'Principal Investigator', and 'Sync to OSF'.

Experiment ID	Dates	Experiment title	Proposal title	PI
P19631-E001-PF	08/02/21-08/07/21	Quantum Oscillations of CePdAl	Magnetically frustrated f-electron intermetallics	Filip Ronning
P19544-E001-PF	08/02/21-08/05/21	Magnetoresistance measurements on BaMnSb2 under st	Studies of exotic quantum phenomena near the quantum limit in	Zhiqiang Mao
P19544-E001-PF	07/28/21-07/31/21	Magnetoresistance measurements on BaMnSb2 under st	Studies of exotic quantum phenomena near the quantum limit in	Zhiqiang Mao
P17518-E008-PF	07/26/21-07/31/21	High-field transport measurements on Ba122+BHO and l	Anisotropic electrical transport in pinning-enhanced Fe-based an	Jens Haenisch
P17849-E008-PF	07/26/21-07/31/21	Shubnikov de Haas oscillation of two-dimensional electr	Shubnikov de Haas oscillation of two dimensional electron gases	Qi Li
P19530-E001-PF	07/12/21-07/17/21	Magnetoelastic and magnetocaloric properties of a topo	Magnetoelastic and magnetocaloric properties of a topological su	Rico Schoenemar
P19540-E001-PF	07/12/21-07/17/21	High Field Quantum Oscillation Study of Bulk van der W.	High Field Studies of Novel Layered Materials	Joseph Checkelsk
P19168-E002-PF	07/05/21-07/17/21	THz spectroscopy of electron doped cuprates in pulsed n	THz spectroscopy of cuprate superconductors in pulsed magnetic	Kirk Post
P19528-E003-PF	07/06/21-07/09/21	Mapping the Fermi surfaces in Kondo insulator YbIr3Si7	Search for novel electronic and magnetic state in ultraintensive m	Lu Li
P17751-E009-PF	06/30/21-07/03/21	Quantum oscillation in heavy fermion system at high ma	Quantum oscillation in heavy fermion system at high magnetic fi	Takao Ebihara
P19528-E003-PF	06/29/21-07/03/21	Mapping the Fermi surfaces in Kondo insulator YbIr3Si7	Search for novel electronic and magnetic state in ultraintensive m	Lu Li
P17682-E014-PF	06/28/21-07/03/21	Probing Topology in isostructural R3Bi4M3 (R = Ce, U; M	Pulsed field measurements on topological semi-metals	Priscila Ferrari Silv
P17875-E002-PF	06/28/21-07/01/21	Field and Strain Tuning Graphite	High Magnetic Field Studies of the Field Induced Phases of Graph	Laurel Winter
P17875-E002-PF	06/25/21-06/26/21	Field and Strain Tuning Graphite	High Magnetic Field Studies of the Field Induced Phases of Graph	Laurel Winter

MagLab Research Software Framework (LabActor)



MagLab Project Metadata OSF Synchronization

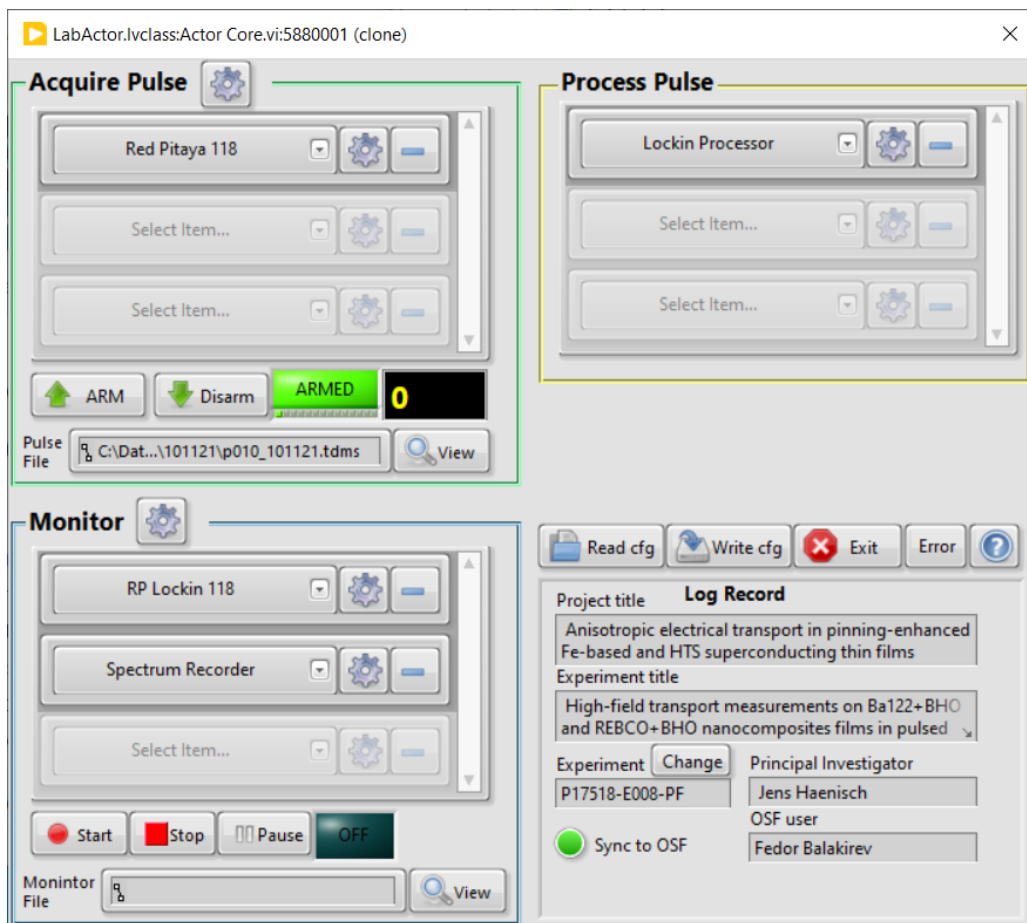


MagLab Research Software Framework (LabActor)

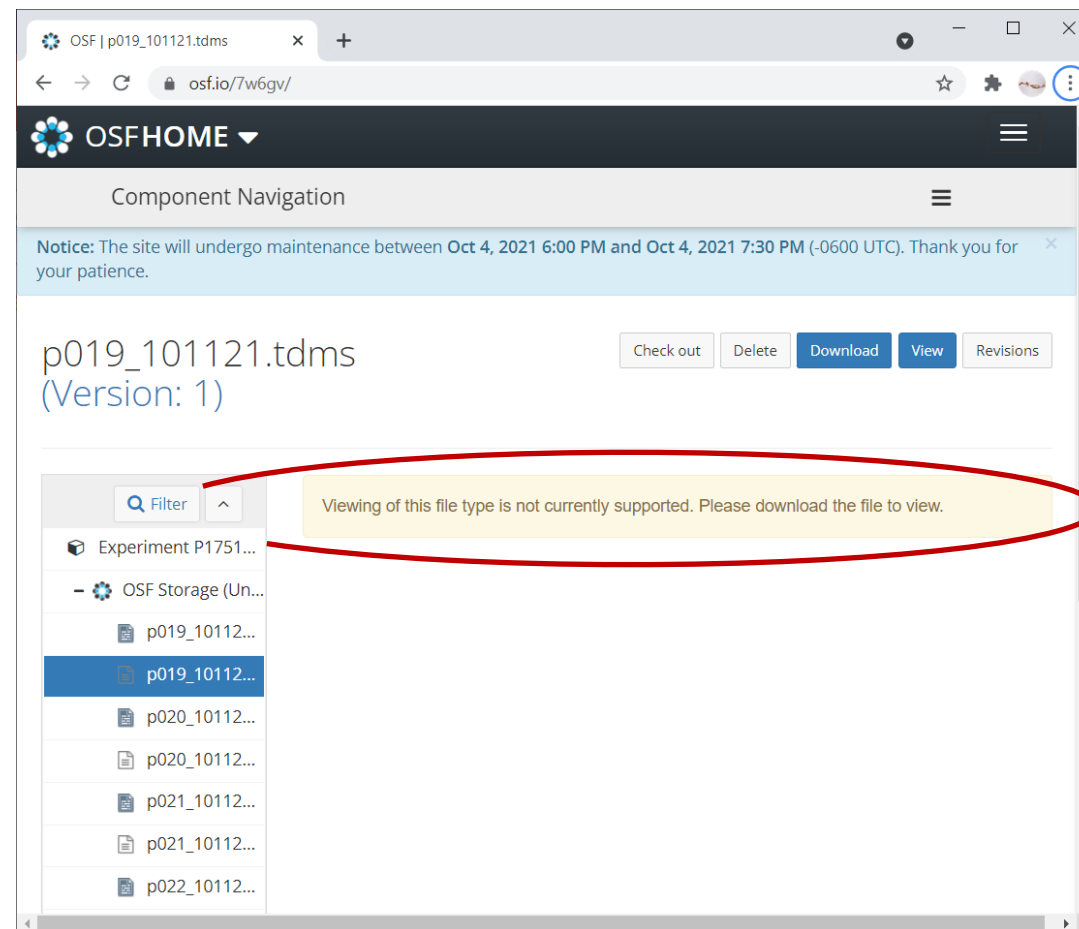
Pre-populated private OSF project workspace



Hierarchical Data Formats and OSF



MagLab Research Software Framework (LabActor)



Captured data upload to linked OSF project
But what's inside? Is it searchable?



Hierarchical Data Formats and OSF Metadata listing



The screenshot shows the LabActor software interface. It is divided into three main sections: 'Acquire Pulse', 'Process Pulse', and 'Monitor'. The 'Acquire Pulse' section includes a dropdown menu for 'Red Pitaya 118', 'Select Item...' buttons, and an 'ARMED' status indicator with a '0' value. The 'Process Pulse' section has a dropdown for 'Lockin Processor' and 'Select Item...' buttons. The 'Monitor' section includes a dropdown for 'RP Lockin 118', 'Spectrum Recorder', and 'Select Item...' buttons. At the bottom, there are 'Start', 'Stop', 'Pause', and 'OFF' buttons, along with a 'Monitor File' field.

MagLab Research Software Framework (LabActor)

The screenshot shows the OSFHOME metadata listing for the file 'p022_101121.md'. The interface includes a navigation bar with 'OSFHOME', 'My Quick Files', 'My Projects', 'Search', 'Support', 'Donate', and 'Fedor Balakirev'. A notice at the top indicates site maintenance. The file details are as follows:

- name** = p022_101121
- Experiment ID** = P17518-E008-PF
- Title** = Anisotropic electrical transport in pinning-enhanced Fe-based and HTS superconducting thin films
- PI** = Jens Haenisch
- Station** = Cell_2
- Channel group** = p * NI_ChannelLength = 249067 * NI_DataType = 10
 - Channel** = Red Pitaya 118 ai0
 - NI_ChannelName = Red Pitaya 118 ai0
 - wf_increment = 8.000000E-9
 - wf_start_time = -1.000000ms
 - Configuration = [Configuration]
 - Configuration.Pre-trigger duration = "0.001000000000"
 - Configuration.Post-trigger duration = "0.001000000000"
 - Configuration.Rate = "12500000.00"
 - Configuration.Ranges = "<size(s)=1> 1.0000000000"
 - Configuration.Re-name channels.<size(s)=> = "0"
 - Configuration.Active channels = "0"
 - Configuration.External clock = "FALSE"
 - NI_Scaling_Status = scaled
 - NI_Number_Of_Scales = 1
 - NI_Scale[0]_Scale_Type = Linear
 - NI_Scale[0]_Linear_Slope = 142.235106E-6
 - NI_Scale[0]_Linear_Y_Intercept = -31.291723E-3
 - NI_Scale[0]_Linear_Input_Source = 4294967295
 - Lockin parameters.Frequency = 8.267196E+3
 - Lockin parameters.Phase = 196.633929E+0
 - Lockin parameters.Synchronous = T
 - Lockin parameters.Points per sine wave = 15120

Accompanying metadata listing



Hierarchical Data Formats and OSF TDMS/HDF5 File Renderer



code{4}lib
JOURNAL

Mission Editorial Committee Process and Structure Code4Lib

Issue 52, 2021-09-22

Closing the Gap between FAIR Data Repositories and Hierarchical Data Formats

by Connor B. Bailey, Fedor F. Balakirev, and Lyudmila L. Balakireva

Many in the scientific community, particularly in publicly funded research, are pushing to adhere to more accessible data standards to maximize the findability, accessibility, interoperability, and reusability (FAIR) of scientific data, especially with the growing prevalence of machine learning

ISSN 1940-5758

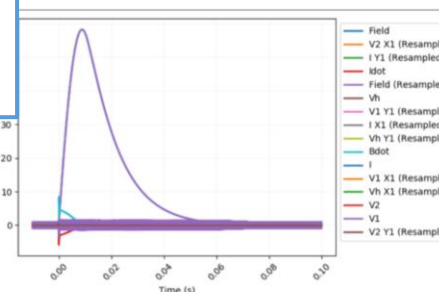
Current Issue

Issue 52, 2021-09-22

My Projects Search Support Donate Connor Bailey

Check out Delete Download View Revisions

Data Plot



Data Table

	Field	V2 X1 (Resampled)	I Y1 (Resampled)	Idot	Field (Resampled)	
0	9.653819e-07	0.624625	-0.005229	-0.001221	1.921389e-06	-0
1	1.930764e-06	0.624624	-0.005228	-0.002441	2.886770e-06	-0
2	2.896146e-06	0.624624	-0.005227	-0.001221	4.861944e-06	-0
3	4.881222e-06	0.624624	-0.005225	-0.002441	9.371498e-06	-0
4	9.415532e-06	0.624623	-0.005224	-0.002441	8.856852e-06	-0

test2.tdms
test6.tdms
test8.tdms

Tags

Add a tag to enhance discoverability

Group	Channel Field	wf_start_time	wf_start_offset	wf_increment	wf_samples	Channel_name
-	-	1903-12-31T23:59:59.990000	0	1e-06	1.1e+05	Field
	Configuration	[Configuration] Configuration.Pre-trigger duration = "0.010000000000" Configuration.Post-trigger duration = "0.100000000000" Configuration.Rate = "1000000.0000" Configuration.Ranges = "10.00000000 10.00000000" Configuration.Re-name channels. = "2" Configuration.Re-name channels 0 = "Bdot" Configuration.Re-name channels 1 = "Idot" Configuration.Active channels = "2,1" Configuration.External clock =				





MagLab OFS Log Book Helper



LabActor.lvclass:Actor Core.vi:5880001 (clone)

Acquire Pulse

Red Pitaya 118

Select Item...

Select Item...

ARM Disarm ARMED 0

Pulse File C:\Dat...\101121\p010_101121.tdms

Process Pulse

Lockin Processor

Select Item...

Select Item...

Monitor

RP Lockin 118

Spectrum Recorder

Select Item...

Start Stop Pause OFF

Monitor File

Log Record

Project title: Anisotropic electrical transport in pinning-enhanced Fe-based and HTS superconducting thin films

Experiment title: High-field transport measurements on Ba122+BHO and REBCO+BHO nanocomposites films in pulsed

Experiment: P17518-E008-PF

Principal Investigator: Jens Haenisch

OSF user: Fedor Balakirev

Sync to OSF

MagLab Research Software Framework (LabActor)

OSF | Experiment P17518-E008-P

osf.io/bwhvt/wiki/home/

OSFHOME

Component Navigation

Notice: The site will undergo maintenance between Oct 4, 2021 6:00 PM and Oct 4, 2021 7:30 PM (-0600 UTC). Thank you for your patience.

Home

Toggle view: View Edit Compare

+ New

Project Wiki Pages

Home

View Wiki Version: (Current) Fedor Balakirev: 2021-10-12 04:05:20+00:00 UTC

Experiment Log Book

Facility: Pulsed Field

Experiment Title: High-field transport measurements on Ba122+BHO and REBCO+BHO nanocomposites films in pulsed field Magnet System: 65 T Multi shot 25 mS (Short Pulse) Proposal Title: Anisotropic electrical transport in pinning-enhanced Fe-based and HTS superconducting thin films Proposal Number:P17518 PI: Jens Haenisch

<https://users.magnet.fsu.edu:443/Experiments/Display.aspx?ExperimentID=37790>

2021-07-26 -- 2021-07-31

13:25 File: p019_101121.tdms
some file comments - field, temperature

13:28 File: p020_101121.tdms

14:16 File: p021_101121.tdms

19:25 File: p022_101121.tdms
some more comments - room temperature SC discovered

Pre-populated OSF experiment log book



MagLab-OSF Integration Tools



The tools for users to create OSF projects linked to their MAGLAB project on the User Portal and the official magnet time calendar.

Pre-populate the OSF project description and wiki with the project metadata.

Data recorded during the user experiment can be uploaded to the corresponding OSF project in FAIR-ready formats.

Use OSF to preview the file content and metadata

