DIII-D Record of Discussion

Purpose

The <u>DIII-D National Fusion Facility</u> is a user facility of the <u>U.S. Department of Energy, Office of Science</u>, under the <u>Fusion Energy Sciences (FES) program</u>. Applicants submitting proposals that involve research activities at DIII-D need to complete this Record of Discussion (ROD). Not all proposals require that the ROD be submitted with the application, but the DIII-D program must have its ROD for coordination with FES.

The purpose of the ROD is to help applicants prepare a proposal that is consistent with the capabilities and plans of the DIII-D program and to provide advance notice to FES concerning the potential resources required to support this proposed research. *The ROD is not a merit review*.

Instructions to Applicants

Before Beginning the Record of Discussion Process

As you prepare your proposal, ensure that you are familiar with the DIII-D facility. The <u>DIII-D User Guide</u> is the reference for identifying information about DIII-D. The <u>Program Documents</u> page provides access to various policies that are relevant in the creation of your proposal. It is especially important to review the Guidance Documents known as "D3DG.06: Program Resources Provided to Users" and "D3DG.08: Data Management Plan" as they provide information directly relevant to the formulation of proposed research activities.

Initiating a Record of Discussion

Use the Contact Form at https://d3dfusion.org/contact-us/ to request support for a Record of Discussion (ROD). In this request, please indicate any preferences for the DIII-D Research Contact. The Research Contact role can be performed by anyone who is not affiliated with the lead institution on the proposal. It is acceptable for the Research Contact to be a paid participant on the proposal (again, this is not a merit review).

After submitting the support request, and before receiving a reply, complete Section 1 of the ROD to the best of your knowledge (all signatures are collected through the DocuSign service, so signature blocks should be left blank until received through DocuSign). The response to your support request will provide you with an administrator who will provide detailed instructions to lead you through the process. The administrator will collect your ROD with Section 1 completed and then perform the evaluation of Section 2. If the ROD is required, then a DIII-D Research Contact will be provided and you will also receive instructions on how to deliver a copy of your pre-proposal and other technical documents as necessary to complete this assessment.

Completing the Record of Discussion

After receiving confirmations from the assigned administrator, interact with your DIII-D Research Contact so that they can complete Section 3. Once Sections 1 through 3 are complete, then your part of the process is complete. The detailed instructions provided by the administrator will describe delivery of the final ROD. The final ROD is automatically provided to the FES Program Manager for DIII-D. It is not necessary to submit the ROD with any proposal, unless the instructions for that proposal specifically require it.

Upon Award of the Proposal

If your proposal is awarded, then please provide confirmation to the administrator as soon as possible. A post-award update to the ROD is required. That process occurs after the scope allowed by the award is finalized.



Record of Discussion (ROD) for Funding Proposals Involving DIII-D Activities

Section 1: Proposal Information Provided by the Proposal Team (please provide all information under the assumption that the proposal is awarded)			
1a) Basic Information			
Principal Investigators (PIs): full names and affiliations, list up to three. The first PI listed will be designated as the point of contact for completing this ROD.			
PI #1 (ROD Point of Contact) Full Name:	PI #2 Full Name:	PI #3 Full Name:	
Affiliation:	Affiliation:	Affiliation:	
Email:	Email:	Email:	
Proposal Title:			
Funding Source for Solicitation (e.g., US	S Department of Energy):		
Solicitation Title:			
Numerical Identifier of Solicitation:			
How is the proposed research scope related to current DIII-D activities? See https://d3dfusion.org/research/ for more information on current and near-term research goals.			
What is the period of performance for this proposal?			
How many proposal team members will require office space at DIII-D, i.e., a dedicated office space for a period of time longer than one month?			
How many new users will this research bring to DIII-D? A new user is someone who has never previously been a DIII-D user.			
Which of the following supporting materials are you providing to DIII-D management to aid in this assessment? Select all that apply.			
Pre-application	Draft Proposal Full	Proposal Other	

1b) Research Goals of the Proposal
Overall Goals of the Proposal
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Specific Goals Related to DIII-D Activities
1c) DIII-D Activities Performed by the Proposing Team
List of DIII-D Tasks to be Performed by the Proposal Team

A DIII-D team member is anyone who participates in the program, regardless of affiliation or funding source. List of Research Support Tasks Provided by DIII-D Team (includes analysis, experiment design/execution, etc.) Support from DIII-D Team Members (person-hours): List of Engineering Support Tasks Provided by the DIII-D Team (includes engineering design, integration of hardware into the facility, etc.) DIII-D Engineering Support (person-hours):	1d) Proposing Team Estimates of DIII-D Support Resource Needs and Facility Impacts (outside of contributions from proposal team listed above)
Support from DIII-D Team Members (person-hours): List of Engineering Support Tasks Provided by the DIII-D Team (includes engineering design, integration of hardware into the facility, etc.)	A DIII-D team member is anyone who participates in the program, regardless of affiliation or funding source.
List of Engineering Support Tasks Provided by the DIII-D Team (includes engineering design, integration of hardware into the facility, etc.)	
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into the facility, etc.)	Support from DIII-D Team Members (person-hours):
DIII-D Engineering Support (person-hours):	into the facility, etc.)
	DIII-D Engineering Support (person-hours):

1d) Proposing Team Estimates of DIII-D Support Resource Needs and Facility Impacts (Continued)
List of Computing Support Tasks Provided by the DIII-D Team (includes Plasma Control System modification/integration, hardware intended to connect to the DIII-D network and its purpose, data analysis setup including workflows, connections to high performance computing, etc.)
DIII-D Computing Support (person-hours):
List Hardware Expected to be Provided by DIII-D (proposing team must ensure compatibility between this request and the support policies of GD 06: Resources Provided to Users)

1d) Prop	osing Team Estimates of DIII-D Support Res	source Needs a	nd Facility Imp	acts (Continued)
	et require a dedicated port access on DIII-D, ace within the machine hall?	Yes	No	Uncertain
	et include any activities that may conflict with the D Data Management Plan is available as a PDF do			Yes
Program Docum	nents site at,			No
https://d3dfusio	n.org/wp-content/uploads/D3D-G08-DMP-RevA	A.pdf		Uncertain
Annual Compu	ting Time Required on DIII-D Systems (CPU-hou	rs):		
Total Disk Stor	age Space Used (GB):			
	e Intended for Use on the DIII-D Computing Clust any that might need to be added)	er (piease list oc	om sortware knov	wil to alleady exist on
	1e) Principal Investigator Cor			
	ne information in this Record of Discussion is accusionable it is my responsibility to inform the DIII.			
Name:	Signed:		Date	2:
	Section 2: Evaluation of Need for	this Record of	f Discussion	
level of engagen research activiti Sections 1 and 2 The proposed re	tment of Energy, Office of Science user facility, the L nent ("standard user participation") is supported ou es fall within the definition of standard user participa search is considered standard user participation if the toother DIII-D users to develop proposals for near-te	tside of any spectation, then the Ro he effort is specif	ial resource needs ecord of Discussio fically limited to th	If the proposed on is completed with only the following activities:
capabilities, and resources, partic	alysis of existing data or data expected from already a cipation in design and analysis studies related to app dependence on the projects being completed within	approved experin proved projects th	nents using only e hat may add new c	xisting computing apabilities in the future
Determination				
Full Ro	OD is Required			
Only S	ections 1 and 2 are Required			
	ne Determination listed above represents my assessive communicated this assessment to the Proposal			
Name:	Signed:		Date) :

Section 3: Assessment of DIII-D Research Contact
3a) Relationship to DIII-D Goals
Describe the DIII-D research goals that are advanced by the proposed activities. These goals should be taken from the most recent Program Plans (Field Work Proposal and Five-year Research Plan) as recorded at DIII-D Sharepoint > DIII-D Hub > Documents > Program Plans
How will the proposed research activities advance the field of fusion energy?
What is the likelihood that the proposal will achieve its stated goals in relation to DIII-D activities?
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3a) Relationship to DIII-D Goals (Continued)
Describe possible pitfalls or challenges that may limit the success of this research proposal (only pertaining to the DIII-D activities).
3b) Response to Proposing Team's Plans and Resource Estimates
How many runs days of dedicated run time are required to meet the stated proposal goals? One run day is equivalent to eight run hours.
In the three sections below, describe any suggested adjustments to the proposed research plan that would improve the likelihood of success as measured against the proposal's stated goals. These suggestions might include interactions between the proposing team and the DIII-D team following confirmation of award, e.g., analysis planning, assignment of specific responsibilities, etc.
Suggestions related to research activities: Suggestions related to engineering activities (any omissions in diagnostic and/or hardware needs should be included here):
Suggestions related to engineering activities (any omissions in diagnostic and/or hardware needs should be included here):

3b) Response to Proposing Team's Plans and Resource Estimates (Continued)		
Suggestions related to computing activities:		
	3c) DIII-D Research Conta	ct Confirmation and Signature
	ve discussed this proposal with the Propo	sal ROD Point of Contact to inform the assessments provided
above.		
Name:	Signed:	Date:
	Section 4: DIII-D	Γechnical Assessments
		that may require attention prior to the proposed activities
		n of comments based on the information provided in this porting materials provided by the proposing team to DIII-D
management.		
	4a) Engineering Assessment	by Chief Engineer or Designate
Engineering Asses	ssment	
I confirm that I rev	viewed the information provided by the P	roposal ROD Lead and the content of this ROD as available.
The engineering as		following award of this proposal and the determination of
final scope.		
	a	_
Name:	Signed:	Date:

4b) Diagnostics Assessment by DIII-D Diagnostics Director or Designate		
Diagnostics Ass	sessment	
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		oposal ROD Lead and the content of this ROD as available. Following award of this proposal and the determination of final
scope.		
		_
Name:	Signed:	Date:
Diama Carta I		Assessment by PCS Lead or Designate
Plasma Control	System Assessment	
I confirm that I	reviewed the information provided by the Pr	roposal ROD Lead and the content of this ROD as available.
	ntrol System assessment above may need to	be adjusted following award of this proposal and the
determination 0	i imai scope.	
Name:	Signed:	Date:
i i tuillo.	Digitou.	Date.

4d) Computing Systems Assessment by Computing Systems Lead or Designate		
Computing Syst	ems Assessment	
L confirm that L	reviewed the information provided by the Propos	al ROD Lead and the content of this ROD as available.
The computing		ed following award of this proposal and the determination
of final scope.		
Name:	Signed:	Date:
1 (dille.	Signed.	Bute.
	Section 5: DIII-D Program M	anagement Assessments
current or poten		tes related to the proposed research's impacts on other all for communicating to the Department of Energy DIII-D
current or poten	management assessments provide high-level no tial future facility activities. These notes are vita	tes related to the proposed research's impacts on other all for communicating to the Department of Energy DIII-D subject proposal is awarded.
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Current or potent Program Manage Research Program I confirm that I	management assessments provide high-level no tital future facility activities. These notes are vitager any issues that may warrant attention if the statement and the second seco	tes related to the proposed research's impacts on other all for communicating to the Department of Energy DIII-D subject proposal is awarded.
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5b) Operations Division Assessment by Operations Director or Designate		
Operations Division Assessment	į.	
		sal ROD Lead and the content of this ROD as available. ted following award of this proposal and the determination
Name:	Signed:	Date:
	5c) DIII-D Directo	or Assessment
DIII-D Director Assessment		
Leanfirm that I reviewed the information provided by the Proposal BOD Lead and the content of this BOD as available		
I confirm that I reviewed the information provided by the Proposal ROD Lead and the content of this ROD as available. The DIII-D director assessment above may need to be adjusted following award of this proposal and the determination of final scope.		
Name:	Signed:	Date: