**Department/Division**: Physics Department

### Operational Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis and Fiscal Year Plan

Complete a SWOT analysis for the operational aspects of the organization – the strengths, opportunities, weaknesses and threats that are within the organization's area of responsibility/control to address. Then identify any fiscal year objectives/activities that are planned to address those items.

Consider identifying institutional/management system opportunities, weaknesses and threats (as appropriate) – these are functions/processes that are outside of the organization's responsibility/ownership but impact organizational achievement of goals. These items will be collected and provided to the appropriate owners to address in their planning processes. No fiscal year activities need to be identified for these items.

Operations are broader than environmental, safety and health, consider areas such as:

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- Administrative support
- Communications
- Compliance with requirements (external and internal)
- Emergency management
- Export control
- Facilities/infrastructure

#### Financial processes

- Hiring/recruiting/ID&E
- Information technology/cyber
- Intellectual property/technology transfer
- Interface with deployed staff
- Project management
- Property
- Quality management

#### ■ Radiological controls

- Records
- Relationship management (external stakeholders/ sponsors or internal staff/organizations)
- Security
- Strategic partnerships/growth/proposal development
- Training
- Work planning and control

STRENGTHS - Organizational	FY Objectives/Activities to Maximize Strengths (if any)
Compliance with requirements	Supportive of new modes of working during COVID that keep people safe as well as productive, i.e. teleworking including remote (out of state, and out of country so long as that is CERN). Taking lessons from this that being open to these working modes post-COVID also would bring programmatic benefit.

Relationship management - Sponsors/Programs -	
Select groups in the Physics department has construction is open and collaborative	
across organizational boundaries. Hosts and fosters collaboration among both HEP and	
NP experiments and leverages the many software and computing synergies between ex-	
periments and HEP/NP. Has no 'flavor of money' problem in collaborations across experi-	
ment and HEP/NP boundaries.	
A diverse group of programs in the physics department has a 'bottom up' self-organiza-	
tion built by the interests of the experiments and developers involved. It accommodates	
participation both through membership and through collaboration. Its flexible organiza-	
tion adds agility; it can adapt quickly to new opportunities.	
The Physics department has strong connections and leadership within our international	
collaborations and through them our facility Users.	
Financial Management -	
The physics department has a strong presence in international collaboration. We helped es-	
tablish the process of change of station and COLA for BNL personnel.	
Project Management -	<del></del>
Excellent record of project management for particle physics and nuclear physics experiments.	
US ATLAS Phase I Upgrade Project recently won DOE Project Management Award.	
Professional Development	Participation in DOE PLI program by Physics Dept mem-
	bers for future professional development to ensure pro-
	fessionals build relationship with other labs and the DOE
	complexes in general.

OPPORTUNITIES		Organizational FY Objectives/Activities
Organizational	Institutional	to Exploit Opportunities
N/A  Hiring/recruiting - Could be improved; The benefit of an international new hire to be able to start remotely would have an immediate impact on the success of the mission at BNL during the limited operation phase. This opportunity should be considered, if the La-		
	boratory maintains limited operations throughout FY21.	

Travel	N/A	•	The opportunity to reduce the paperwork and stream-
			line the process for travel. Currently electronic approval
			process has been set up for domestic travel, and it will
			be exercised in FY21. Extending that to international
			travel will be even more beneficial.

WEAKNESSES		Organizational FY Objectives/Activities
Organizational	Institutional	to Minimize or Eliminate Weaknesses
N/A	Intellectual Property/Tech Transfer - The requirements on BSA owning any and all intellectual property are not possible for many users to sign.	
N/A	<ul> <li>Hiring and Recruiting -</li> <li>The volume of requisitions.</li> <li>The HR workforce is not commensurate with the need of the Physics department.</li> </ul>	
Facilities and Infrastructure - The extended phases for AC units to be upgraded and installed. The constant change and delay in the process.	N/A	Identify funds from IFM and the F&O organization.
N/A	Communications - During limited operations, it becomes nearly impossible to reach people on the phone, work hours are unclear.	
Procurements	N/A	The BNL Procurement process is slow, which has delayed the multiple projects timeline. This has caused significant issues for projects and experiments according throughout the physic department.
N/A	Facilities and Infrastructure - Aging and old facilities - heating, asbestos, roof, longer-term issues	Identify improvement to make a case for the CURL
N/A	Increasing Requirement for New Hires - Increasing numbers of requirements for new hires make competitiveness difficult. Quality of life is also an issue for hiring and retention.	

N/A	Stakeholder relationships - Cost of doing business at Brookhaven is high compared to universities and other institutions.	
N/A	Hiring, Recruiting, and Retention - These processes (H1B, green card, etc.) are slow and can cause significant delays; Immigration Processes are Not Streamlined.	
N/A	<ul> <li>Inclusion -</li> <li>Treatment of foreigners according to rules can be problematic and disrespectful.</li> <li>DOE rules attempt to deal with sensitive issues, but these can create tension and a sense of disrespect.</li> <li>Not always clear how rules applied at BNL are aligned with DOE requirements. BNL rules can be more restrictive or limiting.</li> </ul>	
N/A	<ul> <li>Guest Services -</li> <li>Every "remote user" needs to complete guest registration to use SDCC.</li> <li>The maximum period of the registration is 2 years.</li> <li>There is no mechanism for the GUV center to notify guests directly that their registration will expire.</li> <li>The GUV center could automatically notify guests of impending expiration and help to solve this problem.</li> <li>All persons attending meetings hosted by BNL must complete guest registration.</li> <li>This includes remote meetings. From SBMS, it appears that this requirement is only valid for Foreign Nationals.</li> </ul>	

THREATS		Organizational FY Objectives/Activities	
Organizational	Institutional	to Avoid Threats	
N/A	Hiring/International - From the current policies on visas:  We have had longstanding and productive collaborations with China that are under threat  The ability of our employees with visas to travel is constrained  We are constrained in our ability to attract and onboard	•	
N/A	Relationship Management w/internal Organizations - If the collaborations between the Physics department and the ATRO is not as effective as expected then it will cause a major threat to our stakeholders, mission and the overall goals of the Laboratory. Not able to hire technical personnel - projects may be endangered. Future efforts are hampered because of lack of adequate manpower.	• The steps Physics should consider is ensuring the relationships are strengthen throughout the Directorate with the help of Senior leadership. Once that is in order, then work with other organizations throughout the lab to ensure	
N/A	Compliance with Requirements-COVID - If the Laboratory goes back into minimum safe operations and the Laboratory reduces FTEs from the current Phase 2, the projects and experimental operations may not accomplish the planned mission in 2021.		
Management - The organization of the Physics department may not evolve rapidly enough to match the changing programmatic or operational needs due to the spontaneous reorganization of select divisions.	N/A	Anticipate changes and put resources into planning for them.	

Other Organizational Objectives and FY Activities (not identified above)

- To develop an operational plan to identify different topics to the ALD and the Laboratory on a Quarterly basis.
- Ensure that communications for operations are articulated monthly throughout the department.

### FY Organizational Assessments and/or Monitoring Plan

Provide a list of operational performance measurement activities planned for the upcoming fiscal year. Measurement activities include monitoring activities, such as progress towards achievement of performance objectives, and/or assessment activities.

Objective	Schedule	Owner(s)	Risk(s) Being Addressed
4 <sup>th</sup> QTR, FY2021 implementation of a Physics Annual Assessments	Various	Various owners	It is recommended that the Physics department develop assessment Plans addresses various topical areas including, but not limited to:  • ES&H reviews
			<ul> <li>Credited Controls</li> <li>Operational Readiness Reviews</li> <li>Facility Maintenance and Material Condition</li> <li>Work Planning and control</li> </ul>