

BNL Physics Department

April 2003

Mission: “To carry out and provide support for basic research in high energy, nuclear and condensed matter physics performed at Brookhaven National Laboratory and at other sites in the U.S. and abroad. Both experimental and theoretical research are carried out by the Department along with the development of instrumentation pertinent to the research mission.”

Staff: The Physics Department is staffed by*:

	<u>NP</u>	<u>HEP</u>	<u>BES</u>	<u>Dept.</u>	<u>Other</u>	<u>Tot</u>
PhD Scientist	55	38	19	2	9	123
Postdoctoral Fellow	16	7	9	0	12	44
Engineer/Professional	33	24	3	1	4	65
Designer/Technician	14	13	2	2	7	38
Visitor/Guest/RC	0	0	0	0	0	0
<u>Admin./Clerical</u>	<u>8</u>	<u>6</u>	<u>2</u>	<u>13</u>	<u>4</u>	<u>33</u>
Totals	126	88	35	18	36	303

* FTE Numbers include ATF and U.S. ATLAS Project support

Facilities: Principal Facilities of the Dept. comprise:

87,318 ft² general office space
 20,716 ft² laboratory/machine shops/high-bay space
 47,560 ft² materials storage areas
 155 seat auditorium & lounge, 9 meeting rooms, Research Library,
 Stockroom and normal support areas such as copy and mail rooms

Funding: DOE Funding for FY 2003 (\$M anticipated) comprises:

<u>Fund Type</u>	<u>DOE NP</u>		<u>DOE HEP</u> ¹		<u>DOE BES</u>		<u>Other</u> ²	<u>non-BNL</u> ³
Operating	28.3		17.6		8.2	2.4	2.0	
Equipment	6.5	0.4	0.7	0		0		
<u>Construction</u>	<u>0</u>	<u>3.1</u>	<u>0</u>	<u>0</u>		<u>0</u>		
Totals	34.8		21.1		8.9	2.4	2.0	

¹ includes ATLAS; ² LDRD, SciDAC and CAP; ³ RBRC, non-BNL & misc. sources

BNL Instrumentation Division

April 2003

Mission: “To develop state-of-the-art instrumentation from conceptual through application stages for experimental research carried out by Brookhaven National Laboratory researchers. To provide limited production quantities of such instrumentation for BNL-related experiments.”

Staff: The Instrumentation Division is staffed by:

Scientists	17
Professional Staff	10
Technical Staff	17
Administrative Staff	4
Totals	48
Visitors/Guests/Tech. Collaborators	14

Facilities: Principal Facilities of the ID comprise:

- 40,000 ft² research & tech. support labs & facilities
 - semiconductor detectors lasers & electro-optics
 - gas detectors micro/nano fabrication
 - monolithic circuits vacuum deposition
 - hybrid circuits irradiation facility
 - computer-aided circuit layout radio communication
 - multi-layer PC layout optical metrology
- 2,000 ft² Machine Shop
- 3,000 ft² Office/Administrative Space

Funding: BNL Funding for FY 2003 (\$M to date) comprises:

<u>Fund Type</u>	<u>BNL Ohd</u>	<u>GPE</u>	<u>Prog. Dir.</u>	<u>CRADA</u>	<u>Other</u>
Operating	5.9*	0.0	0.37	0.25	0.44
Equipment	0.0 1.1	0.00	0.00	0.00	0.00
Construction	0.0 0.0	0.00	0.00	0.00	0.00
Totals	5.9 1.1	0.37	0.25	0.44	

*Operating Budget	5.60
LDRD	0.13
Program Develop.	0.17

BNL Collider Accelerator Department

April 2003

Mission: “To develop, improve and operate the suite of particle/HI accelerators plus the RHIC collider that are used to carry out the BNL program of accelerator-based particle/HI experiments at BNL; support of the experimental program, including design, construction & operation of the particle/HI facilities used by the experiments plus partial support of detector and research needs of the experiments is included in the mission. To design and construct accelerator facilities in support of BNL and other national missions.”

Staff: The C-A Department is staffed by:

	<u>NP</u>	<u>HEP</u>	<u>SNS</u>	<u>NASA</u>	<u>Other</u>	<u>Total</u>
PhD Scientists	41	0	6	1	0	48
Postdoctoral Fellows	1	0	1	0	0	2
Engineers/Professional	121	0	33	4	0	158
Designers/Technicians	173	0	48	13	1	235
Visitors/Guests/RCs	0	0	0	0	0	0
Admin./Clerical	<u>21</u>	<u>0</u>	<u>3</u>	<u>1</u>	<u>0</u>	<u>25</u>
Totals	357	0	91	19	1	468

Facilities: Principal Facilities of the C-AD comprise:

- 380,000 ft² accelerator areas
- 290,000 ft² experimental areas
- 280,000 ft² general office/laboratory space
- 100,000 ft² high-bay work space
- 80,000 ft² storage/materials handling space
- Research Library & 190 seat auditorium

Funding: Funding for FY 2003 (\$M to date) comprises

<u>Fund Type</u>	<u>NP</u>	<u>HEP</u>	<u>SNS</u>	<u>NASA</u>	<u>Other</u>	<u>Total</u>
Operating	91.9	0.0	0.0	2.2	1.3	95.4
Equipment	1.3	0.0	0.0	0.0	0.0	1.3
Construction	<u>2.9</u>	<u>0.0</u>	<u>10.0</u>	<u>2.8</u>	<u>0.0</u>	<u>33.8</u>
Totals	96.1	0.0	10.0	5.0	1.3	130.5

BNL Superconducting Magnet Division

April 2003

Mission: “To conceive, develop and build superconducting magnets for use in particle and nuclear physics accelerator and detector applications. To conceive and develop new magnet applications for superconducting wire and cable technologies developed in other laboratories and industry. To conduct accelerator R&D for future accelerators in the U.S. HENP program and for other U.S. and world programs as appropriate.”

Staff: The SM Division is staffed by:

	<u>HEP</u>	<u>NP</u>	<u>Other</u>	<u>Total</u>
PhD Scientists	5	2	2	9
Postdoctoral Fellows	0	0	1	1
Engineers/Professional	12	4	4	20
Designers/Technicians	19	25	14	58
Visitors/Guests/RCs	0	0	0	0
<u>Admin./Clerical</u>	<u>2</u>	<u>1</u>	<u>0</u>	<u>3</u>
Totals	38	32	21	91

Contract/trades/S&EP for the above: ~1

Facilities: Principal Facilities of the SMD comprise:

- 80,000 ft² general office/laboratory space
- 100,000 ft² high-bay work space
- 40,000 ft² storage/materials handling space

Funding: Funding for FY 2003 (\$M to date) comprises:

<u>Fund Type</u>	<u>HEP</u>	<u>NP</u>	<u>Other</u>	<u>Total</u>
Operating	3.5	6.3	1.7	11.5
Equipment	1.8	0.0	0.0	1.8
<u>Construction</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Totals	5.3	6.3	1.7	3.3