

## APPENDIX A: LNL Accelerators operations in 2020

<b>INFN-LNL Accelerators Operation</b>		<b>TAP</b>	<b>CN</b>	<b>AN2000</b>
<b>Year 2020</b>	<b>Unit</b>	<b>Num.</b>	<b>Num.</b>	<b>Num.</b>
Total hours requested for user-op	h	4536	1248	888
Total hours scheduled for user-op	h	768	815	600
<b>Total hours provided for user-op (beam on target)</b>	<b>h</b>	<b>767</b>	<b>815</b>	<b>600</b>
Total down-time for user-op	h	1	0	0
Total down-time for accelerator (conditioning & problems & unscheduled maintenance)	h	720	320	48
Users Efficiency	%	99	100	100
Number of user groups	#	5	13	15
Number of user groups (Basic Nuclear Physics)	#	5	1	1
Number of user groups (Applied Nuclear Physics)	#	0	12	14
Total hours requested for Basic Nuclear Physics	h	3600	<b>317</b>	<b>18</b>
Total hours scheduled for Basic Nuclear Physics	h	768	<b>317</b>	<b>18</b>
<b>Total hours provided for Basic Nuclear Physics</b>	<b>h</b>	<b>767</b>	<b>317</b>	<b>18</b>
Total down-time for Basic Nuclear Physics	h	1	0	0
Efficiency for Basic Nuclear Physics	%	99	100	100
Total hours requested for Applied Nuclear Physics	h	936	498	582
Total hours scheduled for Applied Nuclear Physics	h	0	498	582
<b>Total hours provided for Applied Nuclear Physics</b>	<b>h</b>	<b>0</b>	<b>498</b>	<b>582</b>
Total down-time for Applied Nuclear Physics	h	n.a.	0	0
Efficiency for Applied Nuclear Physics	%	n.a.	100	100

*NOTES: the numbers inserted in the Table are related only to the available machine operation period which was possible due to the COVID-19 situation: in fact, not all requested beam time could be scheduled, since problems have arisen, mainly related to external users' availability (difficulty of travelling due to restrictions) and other COVID-19 related subjects and the needs of application of a new radio-protection law and rules since August 27<sup>th</sup>.*