

**7 MV VAN DE GRAAFF CN ACCELERATOR**

Tempi minimi (giorni) di condizionamento per raggiungere la tensione di terminale (MV)



I fasci  $^4\text{He}^{++}$  e  $^2\text{H}$  sono regolamentati: i fasci di  $^2\text{H}$  vengono forniti solo dopo il completamento dei turni richiedenti fasci di  $^4\text{He}^{++}$ .

**Beam Time Schedule**  
*From September 18<sup>th</sup>, 2006 to February 28, 2007*

	Exp.	Resp.	Ion	Energy [MeV]	Beam/t arget	Current [nA]	channel
<b>SEPTEMBER</b>							
18	<b>RAD PROT</b>	Zafiroopoulos		> 6MV			
19	<b>Sheila LNL</b>	Cherubini	$^4\text{He}^{++}$	12	Cont	< 10	+ 45°
20	<b>Radna-T</b>	Cherubini	$^4\text{He}^{++}$	11	Cont	20-40	+45°
21	<b>Radna-T</b>	Cherubini	$^4\text{He}^{++}$	11	Cont	20-40	+45°
22	<b>Radna-T</b>	Cherubini	$^4\text{He}^{++}$	11	Cont	20-40	+45°
23							
24							
25	<b>GammaCN</b>	Giannatiempo	$^4\text{He}^{++}$	14	$^{102}\text{Ru}$	20	-30°
26	<b>GammaCN</b>	Giannatiempo	$^4\text{He}^{++}$	14	$^{102}\text{Ru}$	20	-30°
27	<b>SID</b>	Agosteo	$^1\text{H}$	> 6	Cont	500	+15°
28	<b>SID</b>	Agosteo	$^1\text{H}$	> 6	Cont	500	+15°
29	$^{56}\text{CO}$	Gadea	$^1\text{H}$	6.5	Cont	3000	0°
30							

# OCTOBER

<b>1</b>							
<b>2</b>	<b>RADEND</b>	Caresana	$^1\text{H}^+$	> 4	C/LiF* <sup>^</sup>	500	+15°
<b>3</b>	<b>RADEND</b>	Caresana	$^1\text{H}^+$	> 4	C/LiF* <sup>^</sup>	500	+15°
<b>4</b>	<b>RADEND</b>	Caresana	$^1\text{H}^+$	> 4	C/LiF* <sup>^</sup>	500	+15°
<b>5</b>	<b>MONDOTER</b>	Agosteo	$^1\text{H}^+$	5	C/Be**	300	+ 0°
<b>6</b>	<b>MONDOTER</b>	Agosteo	$^1\text{H}^+$	5	C/Be**	300	+ 0°
<b>7</b>							
<b>8</b>							
<b>9</b>	<b>Radna-T</b>	Cherubini	$^4\text{He}^{++}$	11	Cont	20-40	+45°
<b>10</b>	<b>Radna-T</b>	Cherubini	$^4\text{He}^{++}$	11	Cont	20-40	+45°
<b>11</b>	<b>Radna-T</b>	Cherubini	$^4\text{He}^{++}$	11	Cont	20-40	+45°
<b>12</b>	<b>ARCHIMEDE</b>	Rigato	$^4\text{He}^{++}$	8.8	Cont	100	-15°
<b>13</b>	<b>ARCHIMEDE</b>	Rigato	$^4\text{He}^{++}$	8.8	Cont	100	-15°
<b>14</b>							
<b>15</b>							
<b>16</b>	<b>MOVPE</b>	Rossetto	$^4\text{He}^+$	3	Cont	100	-15°
<b>17</b>	<b>SIRAD</b>	Bisello	$^4\text{He}^{++}$	8	Cont	1	
<b>18</b>	<b>SIRAD</b>	Bisello	$^4\text{He}^{++}$	8	Cont	1	
<b>19</b>	<b>VERMI</b>	Zafiroopoulos	$^1\text{H}^+$	3-6	C/LiF* <sup>^</sup>	300	0°
<b>20</b>	<b>CN</b>	Contran					
<b>21</b>							
<b>22</b>							
<b>23</b>	<b>SPES-BNCT</b>	d'Errico	$^1\text{H}^+$	5	C/Be**	150	0°
<b>24</b>	<b>SPES-BNCT</b>	d'Errico	$^1\text{H}^+$	5	C/Be**	150	0°
<b>25</b>	<b>SPES-BNCT</b>	d'Errico	$^1\text{H}^+$	5	C/Be**	150	0°
<b>26</b>	<b>SPES-BNCT</b>	d'Errico	$^1\text{H}^+$	5	C/Be**	150	0°
<b>27</b>	<b>SPES-BNCT</b>	d'Errico	$^1\text{H}^+$	5	C/Be**	150	0°
<b>28</b>							
<b>29</b>							
<b>30</b>	<b>ARCHIMEDE</b>	Rigato	$^4\text{He}^+$	5	Cont	100	-15°

31	TN-SS	Della Mea	$^4\text{He}^+$ $^1\text{H}^+$	<4 <4	Cont	100 100	-15°
<b>NOVEMBER</b>							
1							
2	Radna-T	Cherubini	$^4\text{He}^{++}$	11	Cont	20-40	+45°
3	Radna-T	Cherubini	$^4\text{He}^{++}$	11	Cont	20-40	+45°
4							
5							
6	Radna-T	Cherubini	$^4\text{He}^{++}$	11	Cont	20-40	+45°
7	DNA breaks	Belli	$^1\text{H}^+$	3	Cont	< 10	+ 45°
8	DNA breaks	Belli	$^1\text{H}^+$	3	Cont	< 10	+ 45°
9	Di.S.Co.L.I.	Mezzetti	$^1\text{H}^+$	3.5	Superc.	< 50	+15°
10	Di.S.Co.L.I.	Mezzetti	$^1\text{H}^+$	3.5	Superc.	< 50	+15°
11							
12							
13	CN	Contran					
14	Sheila LNL	Cherubini	$^4\text{He}^{++}$	12	Cont	< 10	+ 45°
15	ARCHIMEDE	Rigato	$^4\text{He}^+$	5	Cont	100	-15°
16	MOVPE	Rossetto	$^4\text{He}^+$	3	Cont	100	-15°
17	Luna LNL	Broggini	$^1\text{H}$	< 4	C/ $^{13}\text{C}$	3000	
18							
19							
20	Luna LNL	Broggini	$^1\text{H}$	< 4	C/ $^{13}\text{C}$	3000	
21	Luna LNL	Broggini	$^1\text{H}$	< 4	C/ $^{13}\text{C}$	3000	
22	Sheila RM	Tanzarella	$^1\text{H}$	< 4	Cont	< 10	+ 45°
23	SIRAD	Bisello	$^4\text{He}^+$	4	Cont	1	
24	SIRAD	Bisello	$^4\text{He}^+$	4	Cont	1	
25							
26							
27	SID	Agosteo	$^1\text{H}$	< 4	Cont	500	+15°
28	SID	Agosteo	$^1\text{H}$	< 4	Cont	500	+15°
29	MoSS	Ottaviani	$^4\text{He}^+$	< 4	Cont	< 10	-15°

<b>30</b>	<b>MoSS</b>	<b>Ottaviani</b>	$^4\text{He}^+$	< 4	Cont	< 10	-15°
<b>DECEMBER</b>							
<b>1</b>	<b>DSBfoci</b>	<b>Celotti</b>	$^1\text{H}$	3	Cont	40	+ 45°
<b>2</b>							
<b>3</b>							
<b>4</b>	<b>ARCHIMEDE</b>	<b>Rigato</b>	$^4\text{He}^+$	5	Cont	100	-15°
<b>5</b>	<b>TN-SS</b>	<b>Della Mea</b>	$^4\text{He}^+$ $^1\text{H}^+$	<4 <4	Cont	100 100	- 15°
<b>6</b>	<b>Di.S.Co.L.I.</b>	<b>Mezzetti</b>	$^1\text{H}^+$	3.5	Superc.	< 50	+15°
<b>7</b>	<b>Di.S.Co.L.I.</b>	<b>Mezzetti</b>	$^1\text{H}^+$	3.5	Superc.	< 50	+15°
<b>8</b>							
<b>9</b>							
<b>10</b>							
<b>11</b>	<b>Sheila LNL</b>	<b>Cherubini</b>	$^1\text{H}$	3	Cont	< 10	+ 45°
<b>12</b>	<b>RADEND</b>	<b>Caresana</b>	$^1\text{H}^+$	> 4	C/LiF*^	500	+15°
<b>13</b>	<b>RADEND</b>	<b>Caresana</b>	$^1\text{H}^+$	> 4	C/LiF*^	500	+15°
<b>14</b>	<b>MONDOTER</b>	<b>Agosteo</b>	$^1\text{H}^+$	5	C/Be**	300	+ 0°
<b>15</b>	<b>MONDOTER</b>	<b>Agosteo</b>	$^1\text{H}^+$	5	C/Be**	300	+ 0°
<b>16</b>							
<b>17</b>							
<b>18</b>	<b>Sheila RM</b>	<b>Tanzarella</b>	$^1\text{H}$	< 4	Cont	< 10	+ 45°
<b>19</b>	<b>Luna LNL</b>	<b>Broggini</b>	$^1\text{H}$	< 4	C/ $^{13}\text{C}$	3000	
<b>20</b>	<b>Luna LNL</b>	<b>Broggini</b>	$^1\text{H}$	< 4	C/ $^{13}\text{C}$	3000	
<b>21</b>	<b>TN-SS</b>	<b>Della Mea</b>	$^4\text{He}^+$ $^1\text{H}^+$	<4 <4	Cont	100 100	- 15°
<b>22</b>	<b>CN</b>	<b>Contran</b>					
<b>23</b>							
<b>24</b>							
<b>25</b>							

# JANUARY

<b>6</b>							
<b>7</b>							
<b>8</b>	<b>CN</b>	Contran					
<b>9</b>	<b>CN</b>	Contran					
<b>10</b>	<b>VERMI</b>	Zafiroopoulos	$^2\text{H}^+$	5-6	Cu,Be,Fe	50	0°
<b>11</b>	<b>VERMI</b>	Zafiroopoulos	$^2\text{H}^+$	5-6	Cu,Be,Fe	50	0°
<b>12</b>	<b>CN</b>	Contran					
<b>13</b>							
<b>14</b>							
<b>15</b>	<b>Radna-T</b>	Cherubini	$^1\text{H}$	6	Cont	50	+45°
<b>16</b>	<b>Radna-T</b>	Cherubini	$^1\text{H}$	6	Cont	50	+45°
<b>17</b>	<b>Radna-T</b>	Cherubini	$^1\text{H}$	6	Cont	50	+45°
<b>18</b>	<b>CN</b>	Contran					
<b>19</b>	<b>CN</b>	Contran					
<b>20</b>							
<b>21</b>							
<b>22</b>	<b>GammaCN</b>	Giannatiempo	$^1\text{H}$	7	$^{102}\text{Ru}$	20	-30°
<b>23</b>	<b>GammaCN</b>	Giannatiempo	$^1\text{H}$	7	$^{102}\text{Ru}$	20	-30°
<b>24</b>	<b>PANDAGE</b>	Calvo	$^2\text{H}$	7	C/Be**	3000	-45°
<b>25</b>	<b>PANDAGE</b>	Calvo	$^2\text{H}$	7	C/Be**	3000	-45°
<b>26</b>	<b>PANDAGE</b>	Calvo	$^2\text{H}$	7	C/Be**	3000	-45°
<b>27</b>							
<b>28</b>							
<b>29</b>	<b>DSBfoci</b>	Celotti	$^1\text{H}$	3	Cont	40	+ 45°
<b>30</b>	<b>Luna LNL</b>	Broggini	$^1\text{H}$	< 4	C/ $^{13}\text{C}$	3000	
<b>31</b>	<b>Luna LNL</b>	Broggini	$^1\text{H}$	< 4	C/ $^{13}\text{C}$	3000	

# FEBRUARY

<b>1</b>	<b>PDSi</b>	Berti	$^2\text{H}$	1.2	GaAsN(D)	100	-15°
<b>2</b>	<b>PDSi</b>	Berti	$^2\text{H}$	1.2	GaAsN(D)	100	-15°
<b>3</b>							

<b>4</b>							
<b>5</b>	<b>CN</b>	<b>Contran</b>					
<b>6</b>	<b>DSBfoci</b>	<b>Celotti</b>	$^1\text{H}$	3	Cont	40	+ 45°
<b>7</b>	<b>MoSS</b>	<b>Ottaviani</b>	$^4\text{He}^+$	< 4	Cont	< 10	-15°
<b>8</b>	<b>MoSS</b>	<b>Ottaviani</b>	$^4\text{He}^+$	< 4	Cont	< 10	-15°
<b>9</b>	<b>TN-SS</b>	<b>Della Mea</b>	$^4\text{He}^+$ $^1\text{H}^+$	<4 <4	Cont	100 100	- 15°
<b>10</b>							
<b>11</b>							
<b>12</b>	<b>Sheila RM</b>	<b>Tanzarella</b>	$^1\text{H}$	< 4	Cont	< 10	+ 45°
<b>13</b>	<b>Luna LNL</b>	<b>Broggini</b>	$^1\text{H}$	< 4	C/ $^{13}\text{C}$	3000	
<b>14</b>	<b>Luna LNL</b>	<b>Broggini</b>	$^1\text{H}$	< 4	C/ $^{13}\text{C}$	3000	
<b>15</b>	<b>SID</b>	<b>Agosteo</b>	$^1\text{H}$	< 4	Cont	500	+15°
<b>16</b>	<b>SID</b>	<b>Agosteo</b>	$^1\text{H}$	< 4	Cont	500	+15°
<b>17</b>							
<b>18</b>							
<b>19</b>	<b>DSBfoci</b>	<b>Celotti</b>	$^1\text{H}$	3	Cont	40	+ 45°
<b>20</b>	<b>MoSS</b>	<b>Ottaviani</b>	$^4\text{He}^+$	< 4	Cont	< 10	-15°
<b>21</b>	<b>MoSS</b>	<b>Ottaviani</b>	$^4\text{He}^+$	< 4	Cont	< 10	-15°
<b>22</b>	<b>PDSi</b>	<b>Berti</b>	$^2\text{H}$	1.2	GaAsN(D)	100	-15°
<b>23</b>	<b>PDSi</b>	<b>Berti</b>	$^2\text{H}$	1.2	GaAsN(D)	100	-15°
<b>24</b>							
<b>25</b>							
<b>26</b>	<b>CN</b>	<b>Contran</b>					
<b>27</b>	<b>DNA breaks</b>	<b>Belli</b>	$^1\text{H}^+$	3	Cont	< 10	+ 45°
<b>28</b>	<b>DNA breaks</b>	<b>Belli</b>	$^1\text{H}^+$	3	Cont	< 10	+ 45°

\*  $^7\text{LiF}$  spessore  $\leq 1 \text{ mg/cm}^2$

^ sorgente senza schermatura locale

\*\* Bersaglio infinito

°  $\leq 1.5 \text{ Ci}$