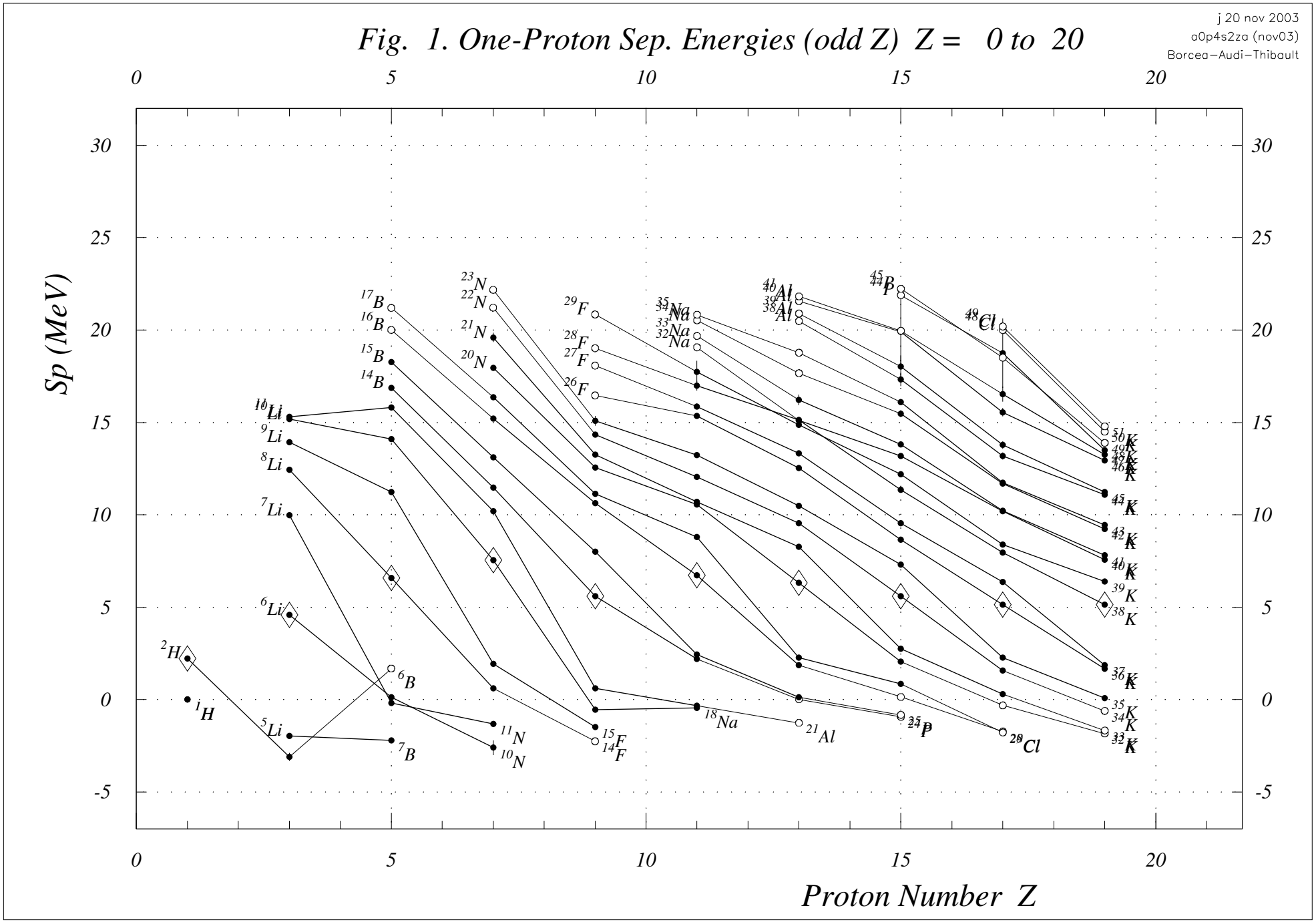


Fig. 1. One-Proton Sep. Energies (odd Z) Z = 0 to 20
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sp (MeV)
Proton Number Z
0
5
10
15
20
30
25
20
15
10
5
0
-5
2H
1H
5Li
6Li
7Li
8Li
9Li
10Li
6B
7B
10N
11N
14F
15F
18Na
21Al
24P
28Cl
17B
16B
15B
14B
23N
22N
21N
20N
29F
28F
27F
26F
35Na
34Na
33Na
32Na
41Al
40Al
39Al
38Al
45P
44P
49Cl
48Cl
51K
50K
49K
48K
47K
46K
45K
44K
43K
42K
41K
40K
39K
38K
37K
36K
35K
34K
33K
32K

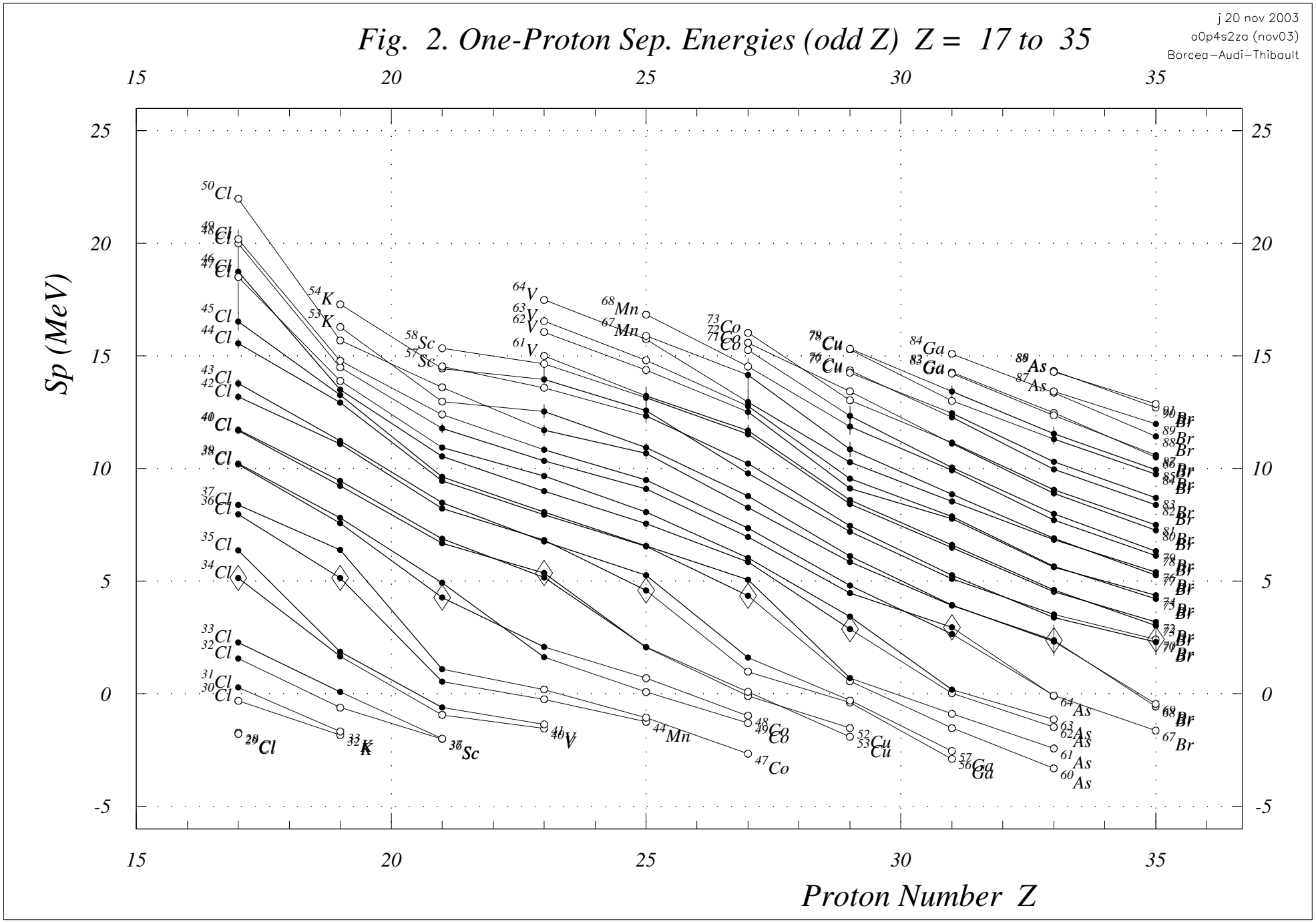


Fig. 2. One-Proton Sep. Energies (odd Z) Z = 17 to 35
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sp (MeV)
Proton Number Z
15
20
25
30
35
-5
0
5
10
15
20
25
50Cl
49Cl
48Cl
47Cl
46Cl
45Cl
44Cl
43Cl
42Cl
40Cl
38Cl
37Cl
36Cl
35Cl
34Cl
33Cl
32Cl
31Cl
30Cl
29Cl
54K
53K
33K
32K
58Sc
57Sc
37Sc
36Sc
64V
63V
62V
61V
41V
40V
68Mn
67Mn
44Mn
73Co
72Co
71Co
48Co
49Co
47Co
79Cu
78Cu
77Cu
52Cu
53Cu
84Ga
83Ga
57Ga
56Ga
89As
87As
64As
63As
62As
61As
60As
91Br
90Br
89Br
88Br
87Br
86Br
85Br
84Br
83Br
82Br
81Br
80Br
79Br
78Br
77Br
76Br
75Br
74Br
73Br
72Br
71Br
70Br
69Br
68Br
67Br

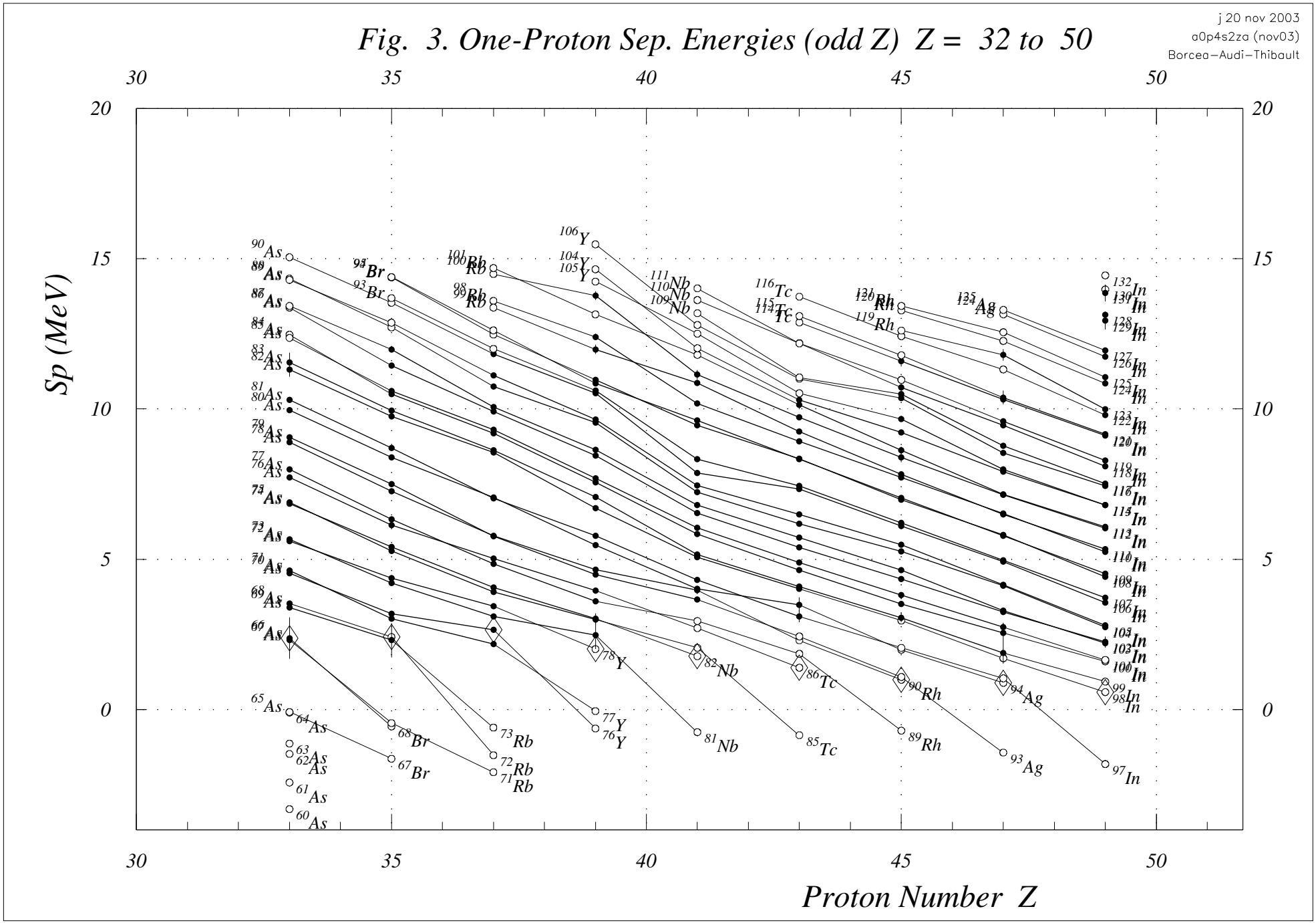


Fig. 3. One-Proton Sep. Energies (odd Z) Z = 32 to 50
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sp (MeV)
Proton Number Z
30
35
40
45
50
20
15
10
5
0
90As
89As
88As
87As
86As
85As
84As
83As
82As
81As
80As
79As
78As
77As
76As
75As
74As
73As
72As
71As
70As
69As
68As
67As
66As
65As
64As
63As
62As
61As
60As
93Br
92Br
91Br
90Br
89Br
88Br
87Br
86Br
85Br
84Br
83Br
82Br
81Br
80Br
79Br
78Br
77Br
76Br
75Br
74Br
73Br
72Br
71Br
70Br
69Br
68Br
67Br
101Rb
100Rb
99Rb
98Rb
97Rb
96Rb
95Rb
94Rb
93Rb
92Rb
91Rb
90Rb
89Rb
88Rb
87Rb
86Rb
85Rb
84Rb
83Rb
82Rb
81Rb
80Rb
79Rb
78Rb
77Rb
76Rb
75Rb
74Rb
73Rb
72Rb
71Rb
106Y
105Y
104Y
103Y
102Y
101Y
100Y
99Y
98Y
97Y
96Y
95Y
94Y
93Y
92Y
91Y
90Y
89Y
88Y
87Y
86Y
85Y
84Y
83Y
82Y
81Y
80Y
79Y
78Y
77Y
76Y
111Nb
110Nb
109Nb
108Nb
107Nb
106Nb
105Nb
104Nb
103Nb
102Nb
101Nb
100Nb
99Nb
98Nb
97Nb
96Nb
95Nb
94Nb
93Nb
92Nb
91Nb
90Nb
89Nb
88Nb
87Nb
86Nb
85Nb
84Nb
83Nb
82Nb
81Nb
116Tc
115Tc
114Tc
113Tc
112Tc
111Tc
110Tc
109Tc
108Tc
107Tc
106Tc
105Tc
104Tc
103Tc
102Tc
101Tc
100Tc
99Tc
98Tc
97Tc
96Tc
95Tc
94Tc
93Tc
92Tc
91Tc
90Tc
89Tc
88Tc
87Tc
86Tc
85Tc
121Rh
120Rh
119Rh
118Rh
117Rh
116Rh
115Rh
114Rh
113Rh
112Rh
111Rh
110Rh
109Rh
108Rh
107Rh
106Rh
105Rh
104Rh
103Rh
102Rh
101Rh
100Rh
99Rh
98Rh
97Rh
96Rh
95Rh
94Rh
93Rh
92Rh
91Rh
90Rh
89Rh
125Ag
124Ag
123Ag
122Ag
121Ag
120Ag
119Ag
118Ag
117Ag
116Ag
115Ag
114Ag
113Ag
112Ag
111Ag
110Ag
109Ag
108Ag
107Ag
106Ag
105Ag
104Ag
103Ag
102Ag
101Ag
100Ag
99Ag
98Ag
97Ag
96Ag
95Ag
94Ag
93Ag
132In
131In
130In
129In
128In
127In
126In
125In
124In
123In
122In
121In
120In
119In
118In
117In
116In
115In
114In
113In
112In
111In
110In
109In
108In
107In
106In
105In
104In
103In
102In
101In
100In
99In
98In
97In

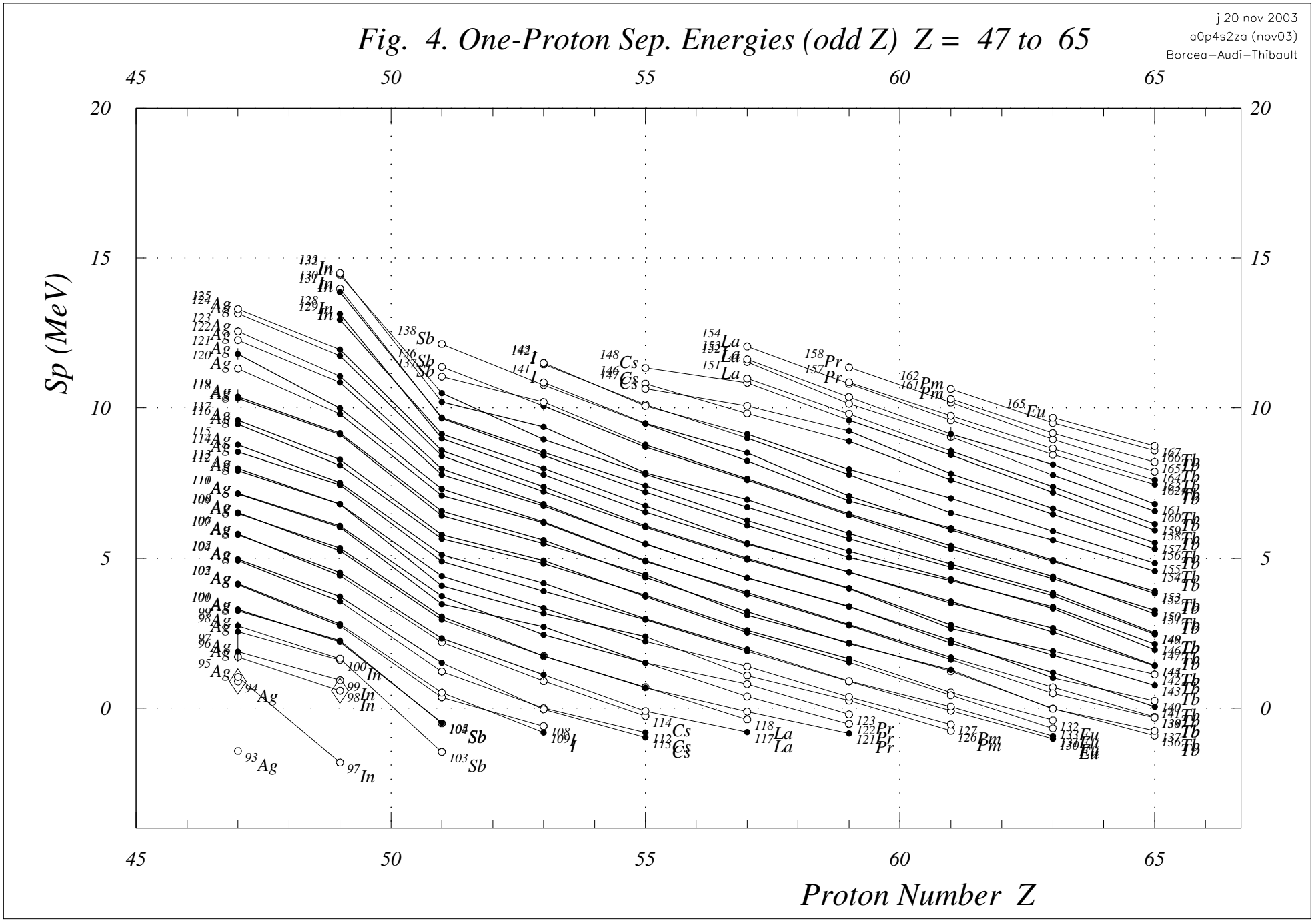


Fig. 4. One-Proton Sep. Energies (odd Z) Z = 47 to 65
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sp (MeV)
Proton Number Z
45
50
55
60
65
20
15
10
5
0

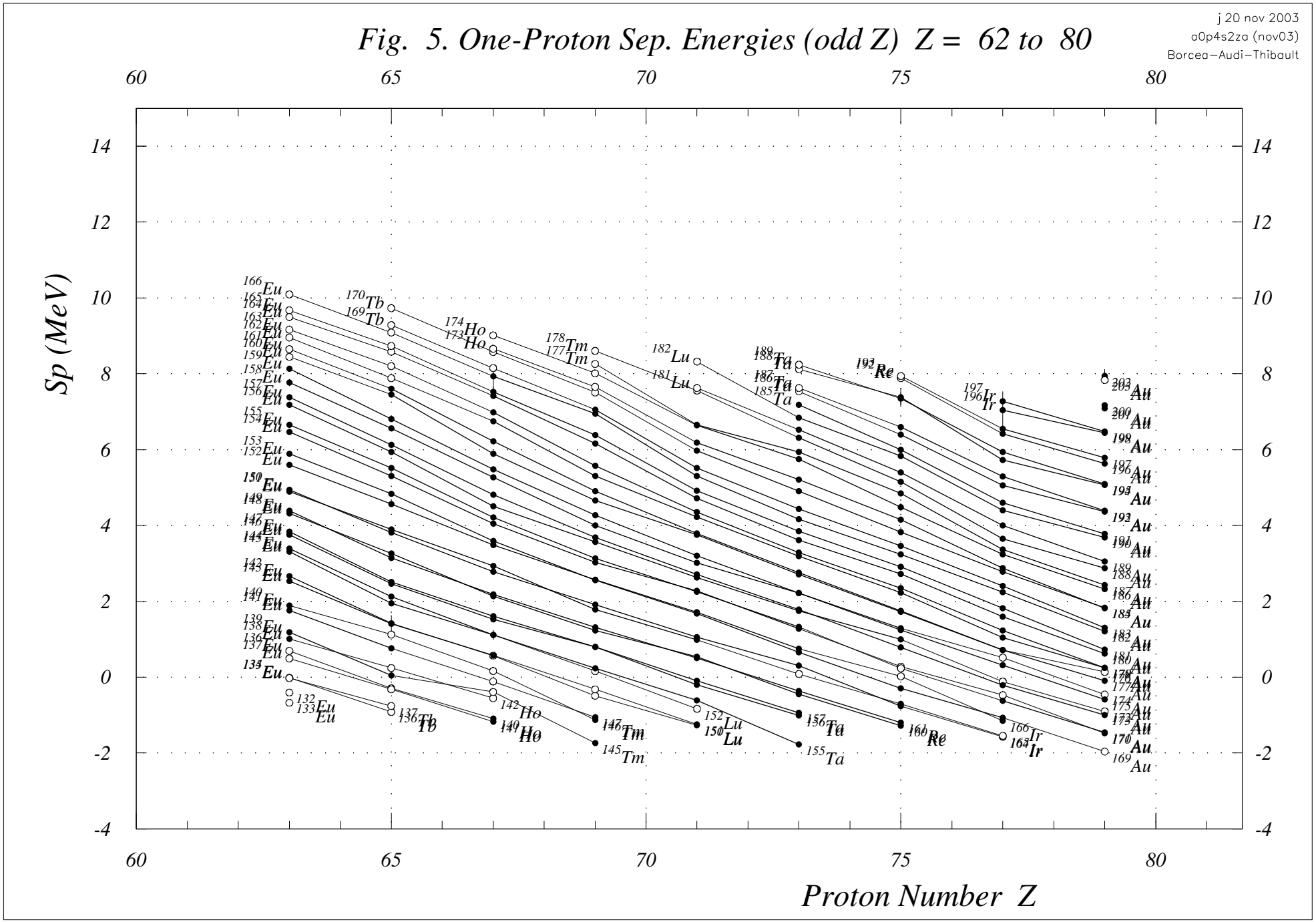


Fig. 5. One-Proton Sep. Energies (odd Z) Z = 62 to 80
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sp (MeV)
Proton Number Z
60
65
70
75
80
14
12
10
8
6
4
2
0
-2
-4
166Eu
165Eu
164Eu
163Eu
162Eu
161Eu
160Eu
159Eu
158Eu
157Eu
156Eu
155Eu
154Eu
153Eu
152Eu
150Eu
148Eu
147Eu
146Eu
145Eu
143Eu
142Eu
140Eu
139Eu
138Eu
137Eu
136Eu
135Eu
132Eu
133Eu
170Tb
169Tb
137Tb
136Tb
174Ho
173Ho
142Ho
141Ho
140Ho
178Tm
177Tm
147Tm
146Tm
145Tm
182Lu
181Lu
152Lu
150Lu
189Ta
188Ta
187Ta
186Ta
185Ta
157Ta
156Ta
155Ta
193Re
192Re
161Re
160Re
197Ir
196Ir
166Ir
165Ir
202Au
201Au
200Au
198Au
197Au
196Au
195Au
193Au
192Au
191Au
190Au
189Au
188Au
187Au
186Au
185Au
184Au
183Au
182Au
181Au
180Au
179Au
178Au
177Au
176Au
175Au
174Au
173Au
172Au
171Au
170Au
169Au

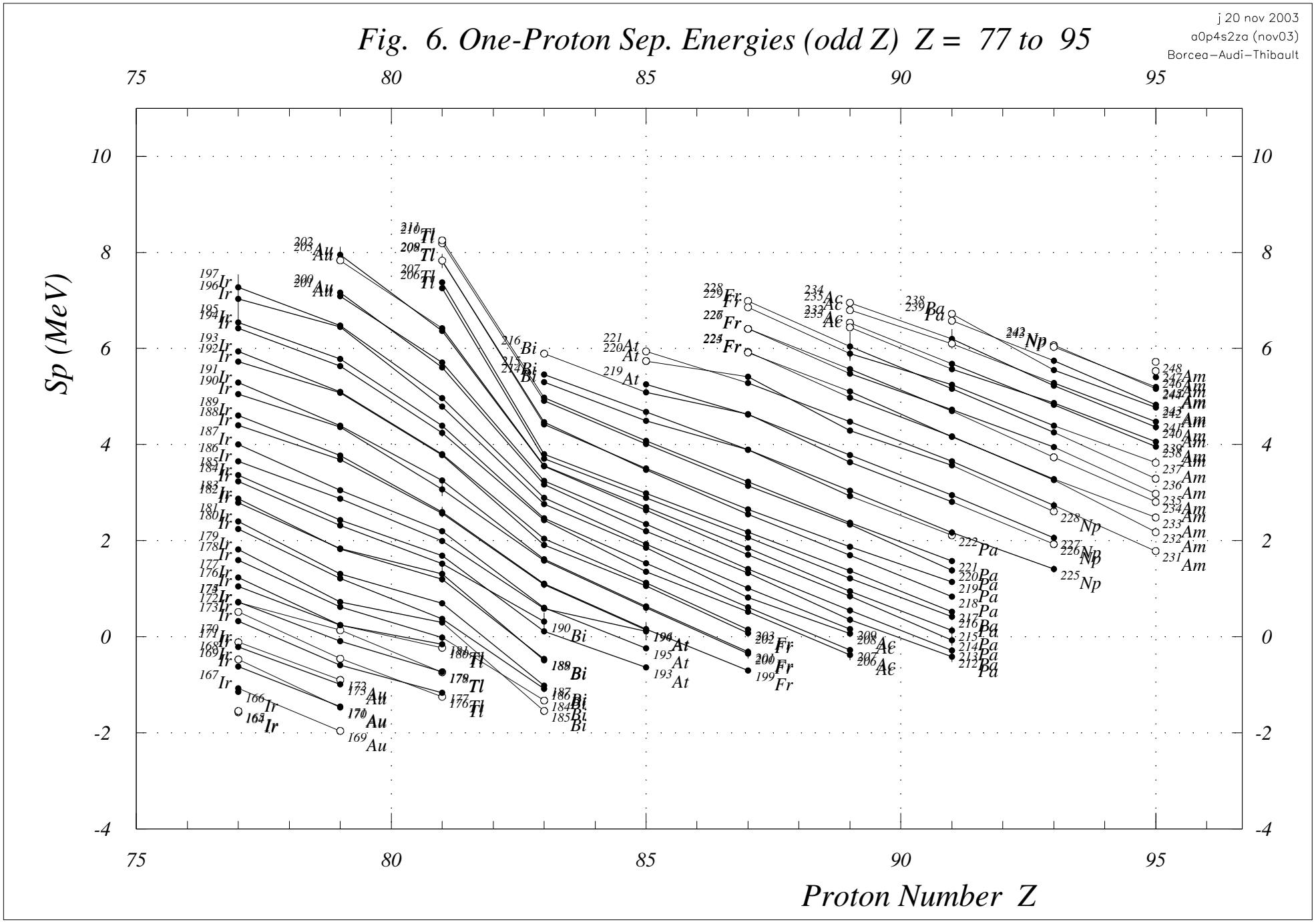
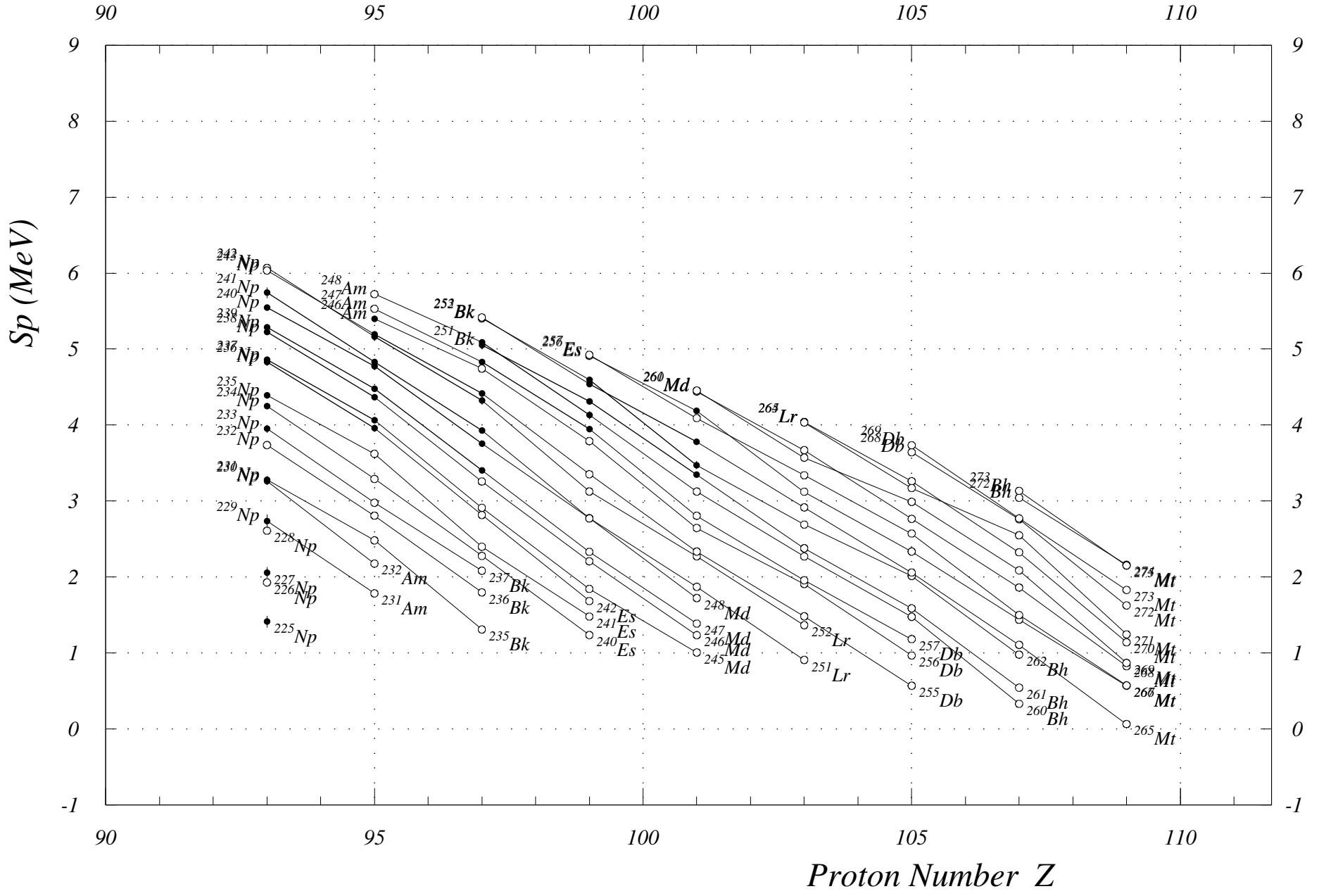


Fig. 6. One-Proton Sep. Energies (odd Z) Z = 77 to 95
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sp (MeV)
Proton Number Z
75
80
85
90
95
10
8
6
4
2
0
-2
-4

Fig. 7. One-Proton Sep. Energies (odd Z) Z = 92 to 110

j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault



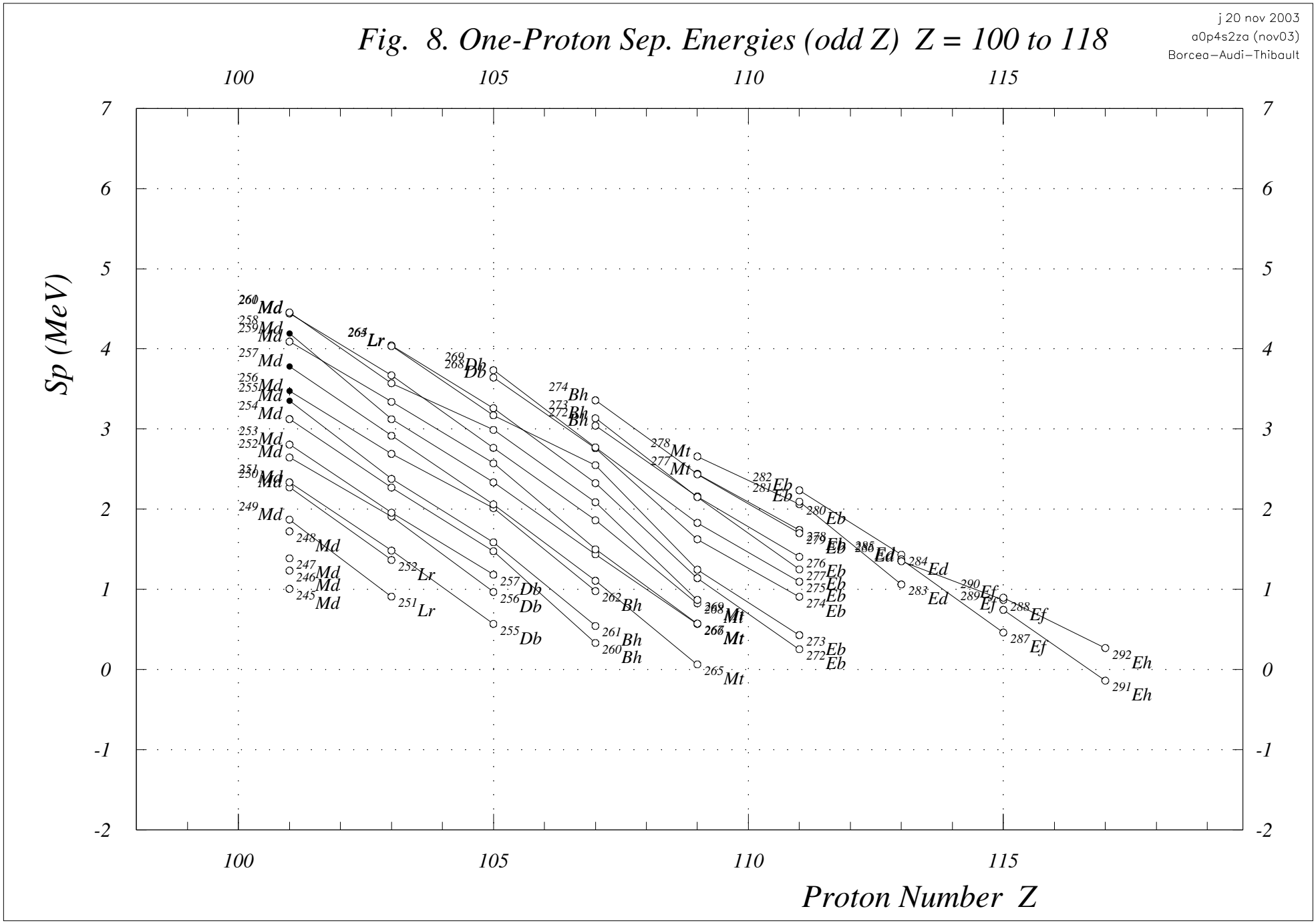


Fig. 8. One-Proton Sep. Energies (odd Z) Z = 100 to 118
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sp (MeV)
Proton Number Z
100
105
110
115
7
6
5
4
3
2
1
0
-1
-2
260 Md
258 Md
259 Md
Md
257 Md
256 Md
255 Md
Md
254 Md
253 Md
252 Md
Md
250 Md
Md
249 Md
248 Md
247 Md
246 Md
Md
245 Md
265 Lr
252 Lr
251 Lr
269 Db
268 Db
Db
257 Db
256 Db
255 Db
274 Bh
273 Bh
272 Bh
Bh
262 Bh
261 Bh
260 Bh
278 Mt
277 Mt
269 Mt
268 Mt
Mt
267 Mt
265 Mt
282 Eb
281 Eb
Eb
280 Eb
279 Eb
Eb
276 Eb
277 Eb
275 Eb
274 Eb
Eb
273 Eb
272 Eb
Eb
285 Ed
284 Ed
283 Ed
290 Ef
289 Ef
Ef
288 Ef
287 Ef
292 Eh
291 Eh