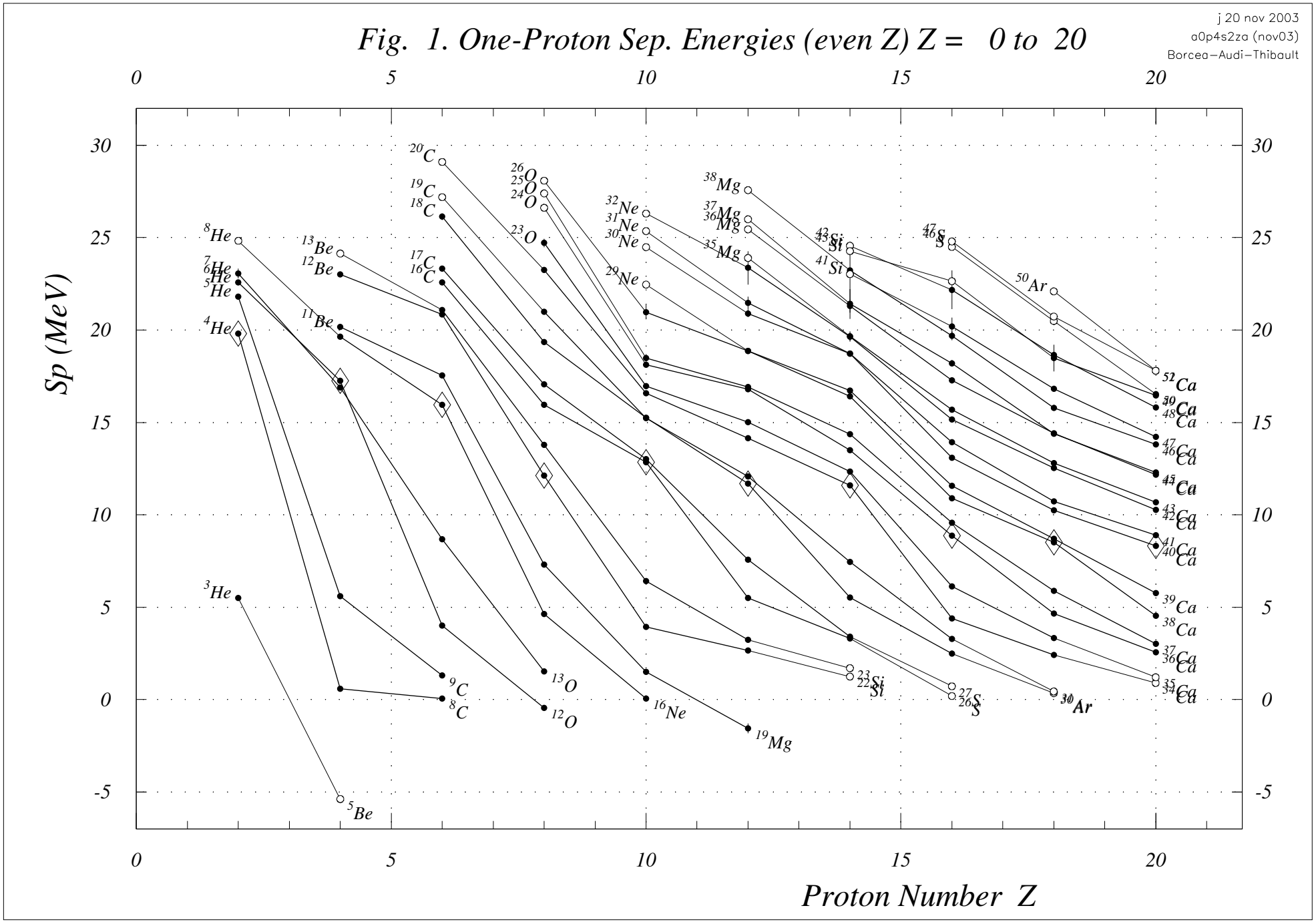


Fig. 1. One-Proton Sep. Energies (even Z) Z = 0 to 20
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sp (MeV)
Proton Number Z
0
5
10
15
20
30
25
20
15
10
5
0
-5
^{8}He
^{7}He
^{6}He
^{5}He
^{4}He
^{3}He
^{5}Be
^{13}Be
^{12}Be
^{11}Be
^{9}C
^{8}C
^{20}C
^{19}C
^{18}C
^{17}C
^{16}C
^{26}O
^{25}O
^{24}O
^{23}O
^{13}O
^{12}O
^{32}Ne
^{31}Ne
^{30}Ne
^{29}Ne
^{16}Ne
^{38}Mg
^{37}Mg
^{36}Mg
^{35}Mg
^{19}Mg
^{43}Si
^{42}Si
^{41}Si
^{23}Si
^{22}Si
^{47}S
^{46}S
^{27}S
^{26}S
^{50}Ar
^{30}Ar
^{51}Ca
^{50}Ca
^{49}Ca
^{48}Ca
^{47}Ca
^{46}Ca
^{45}Ca
^{44}Ca
^{43}Ca
^{42}Ca
^{41}Ca
^{40}Ca
^{39}Ca
^{38}Ca
^{37}Ca
^{36}Ca
^{35}Ca
^{34}Ca

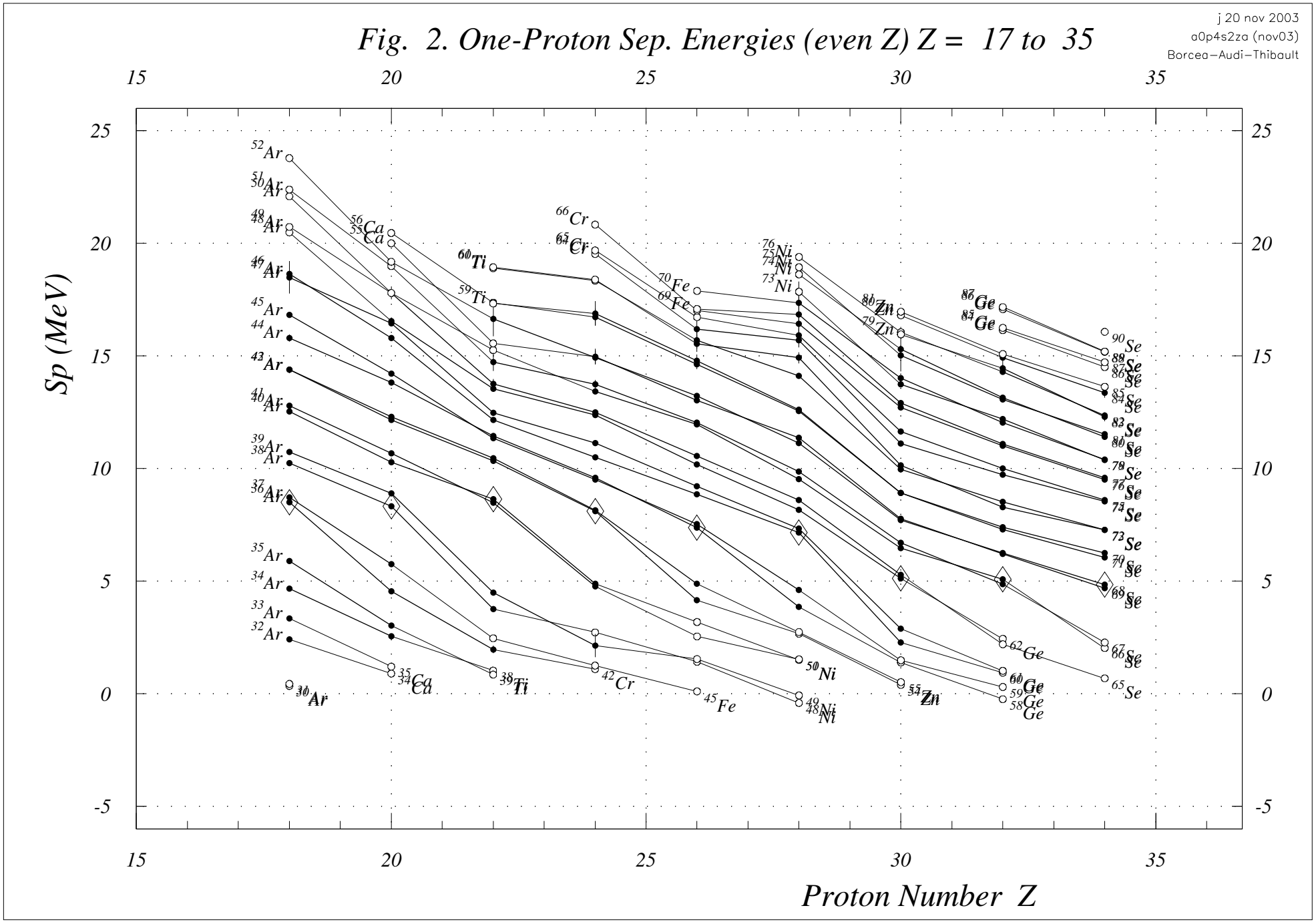


Fig. 2. One-Proton Sep. Energies (even Z) Z = 17 to 35
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sp (MeV)
Proton Number Z
15
20
25
30
35
-5
0
5
10
15
20
25
52Ar
50Ar
48Ar
46Ar
45Ar
44Ar
43Ar
41Ar
40Ar
39Ar
38Ar
37Ar
36Ar
35Ar
34Ar
33Ar
32Ar
31Ar
56Ca
55Ca
54Ca
53Ca
52Ca
51Ca
50Ca
49Ca
48Ca
47Ca
46Ca
45Ca
44Ca
43Ca
42Ca
41Ca
40Ca
39Ca
38Ca
37Ca
36Ca
35Ca
34Ca
60Ti
59Ti
58Ti
57Ti
56Ti
55Ti
54Ti
53Ti
52Ti
51Ti
50Ti
49Ti
48Ti
47Ti
46Ti
45Ti
44Ti
43Ti
42Ti
41Ti
40Ti
39Ti
38Ti
66Cr
65Cr
64Cr
63Cr
62Cr
61Cr
60Cr
59Cr
58Cr
57Cr
56Cr
55Cr
54Cr
53Cr
52Cr
51Cr
50Cr
49Cr
48Cr
47Cr
46Cr
45Cr
44Cr
70Fe
69Fe
68Fe
67Fe
66Fe
65Fe
64Fe
63Fe
62Fe
61Fe
60Fe
59Fe
58Fe
57Fe
56Fe
55Fe
54Fe
53Fe
52Fe
51Fe
50Fe
49Fe
48Fe
47Fe
46Fe
45Fe
76Ni
75Ni
74Ni
73Ni
72Ni
71Ni
70Ni
69Ni
68Ni
67Ni
66Ni
65Ni
64Ni
63Ni
62Ni
61Ni
60Ni
59Ni
58Ni
57Ni
56Ni
55Ni
54Ni
53Ni
52Ni
51Ni
50Ni
49Ni
48Ni
81Zn
80Zn
79Zn
78Zn
77Zn
76Zn
75Zn
74Zn
73Zn
72Zn
71Zn
70Zn
69Zn
68Zn
67Zn
66Zn
65Zn
64Zn
63Zn
62Zn
61Zn
60Zn
59Zn
58Zn
57Zn
56Zn
55Zn
54Zn
53Zn
87Ge
86Ge
85Ge
84Ge
83Ge
82Ge
81Ge
80Ge
79Ge
78Ge
77Ge
76Ge
75Ge
74Ge
73Ge
72Ge
71Ge
70Ge
69Ge
68Ge
67Ge
66Ge
65Ge
64Ge
63Ge
62Ge
61Ge
60Ge
59Ge
58Ge
90Se
89Se
88Se
87Se
86Se
85Se
84Se
83Se
82Se
81Se
80Se
79Se
78Se
77Se
76Se
75Se
74Se
73Se
72Se
71Se
70Se
69Se
68Se
67Se
66Se
65Se

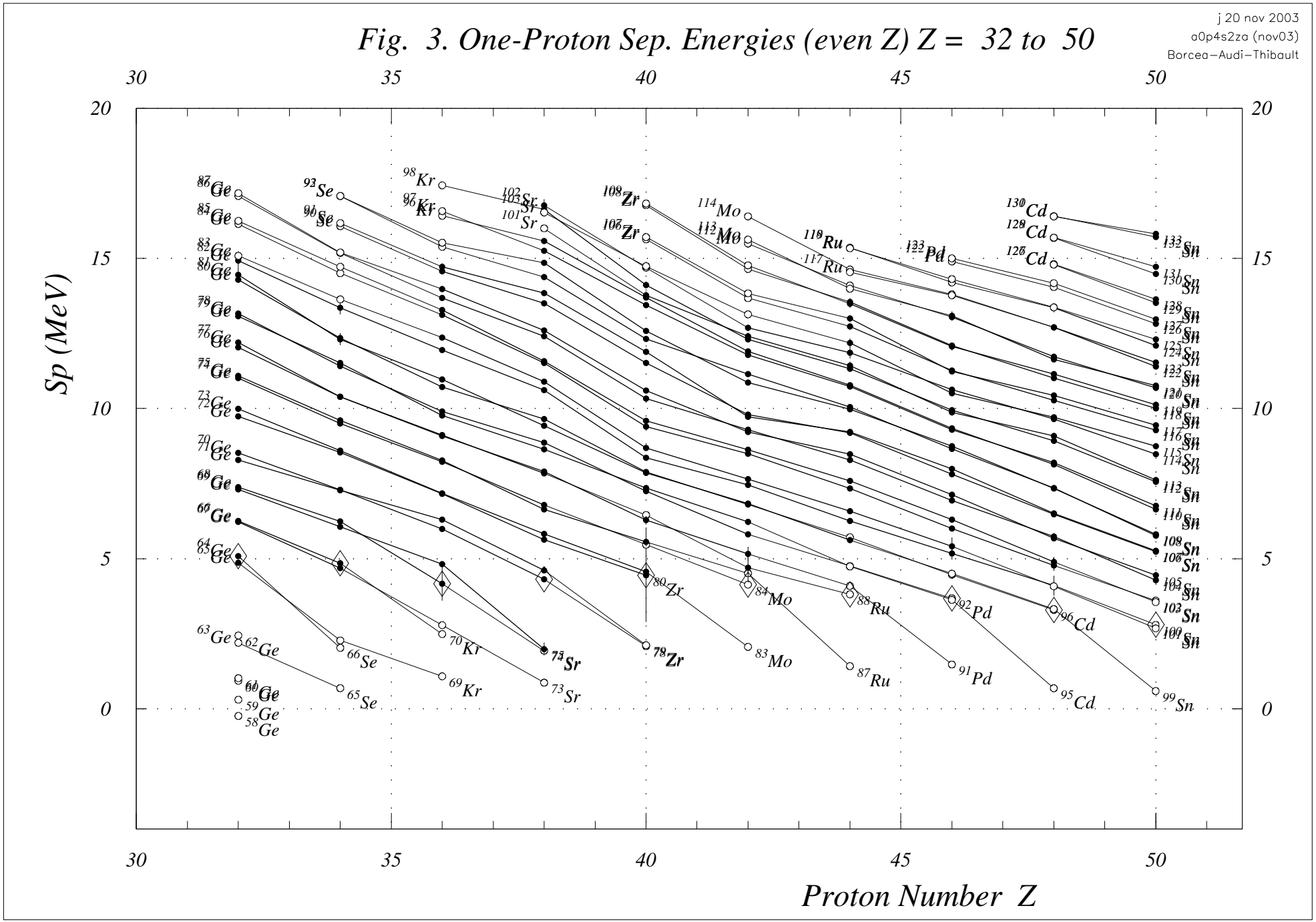


Fig. 3. One-Proton Sep. Energies (even Z) Z = 32 to 50
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sp (MeV)
Proton Number Z
30
35
40
45
50
0
5
10
15
20
63Ge
62Ge
65Se
66Se
69Kr
70Kr
73Sr
78Zr
83Mo
87Ru
91Pd
95Cd
99Sn

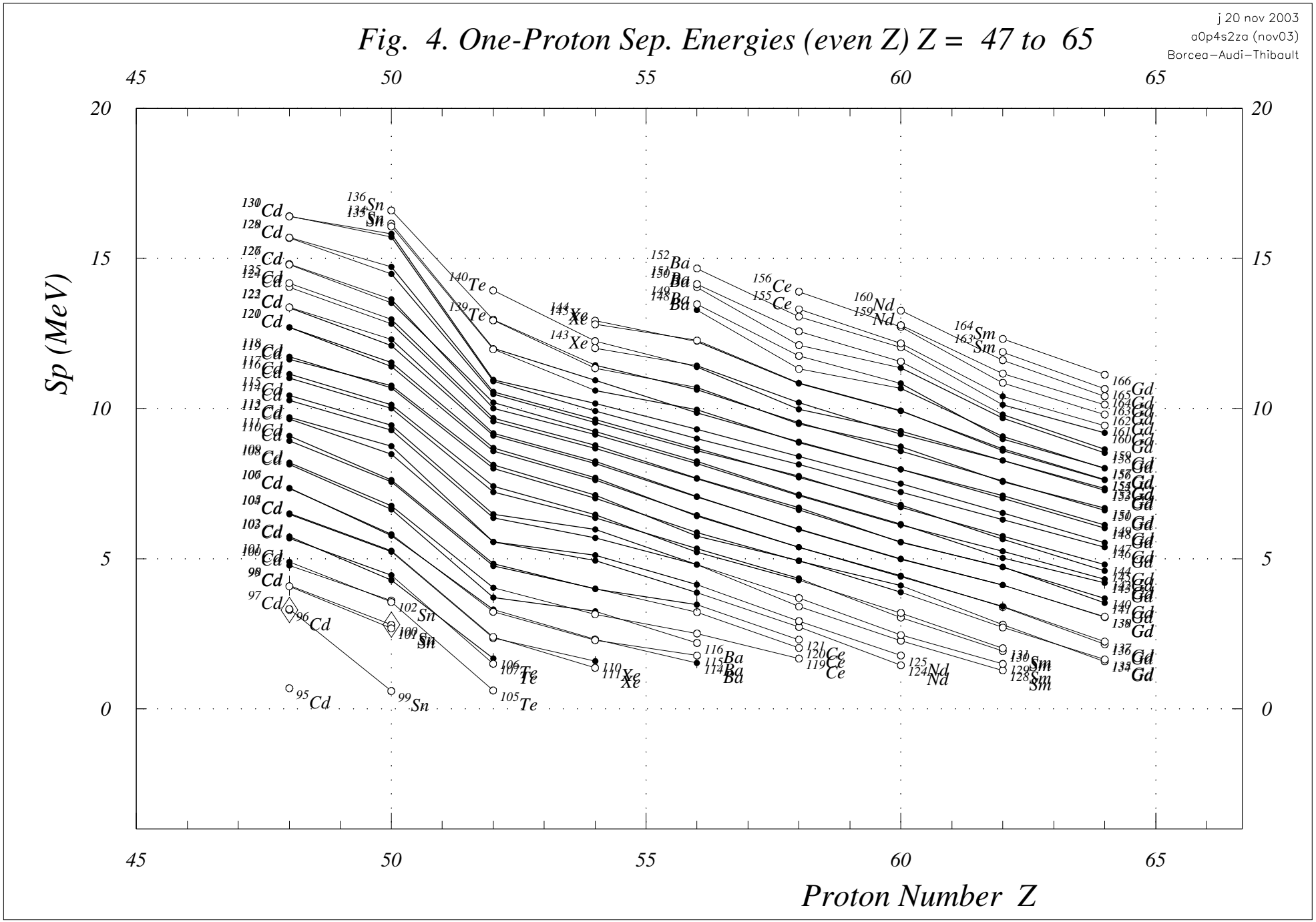
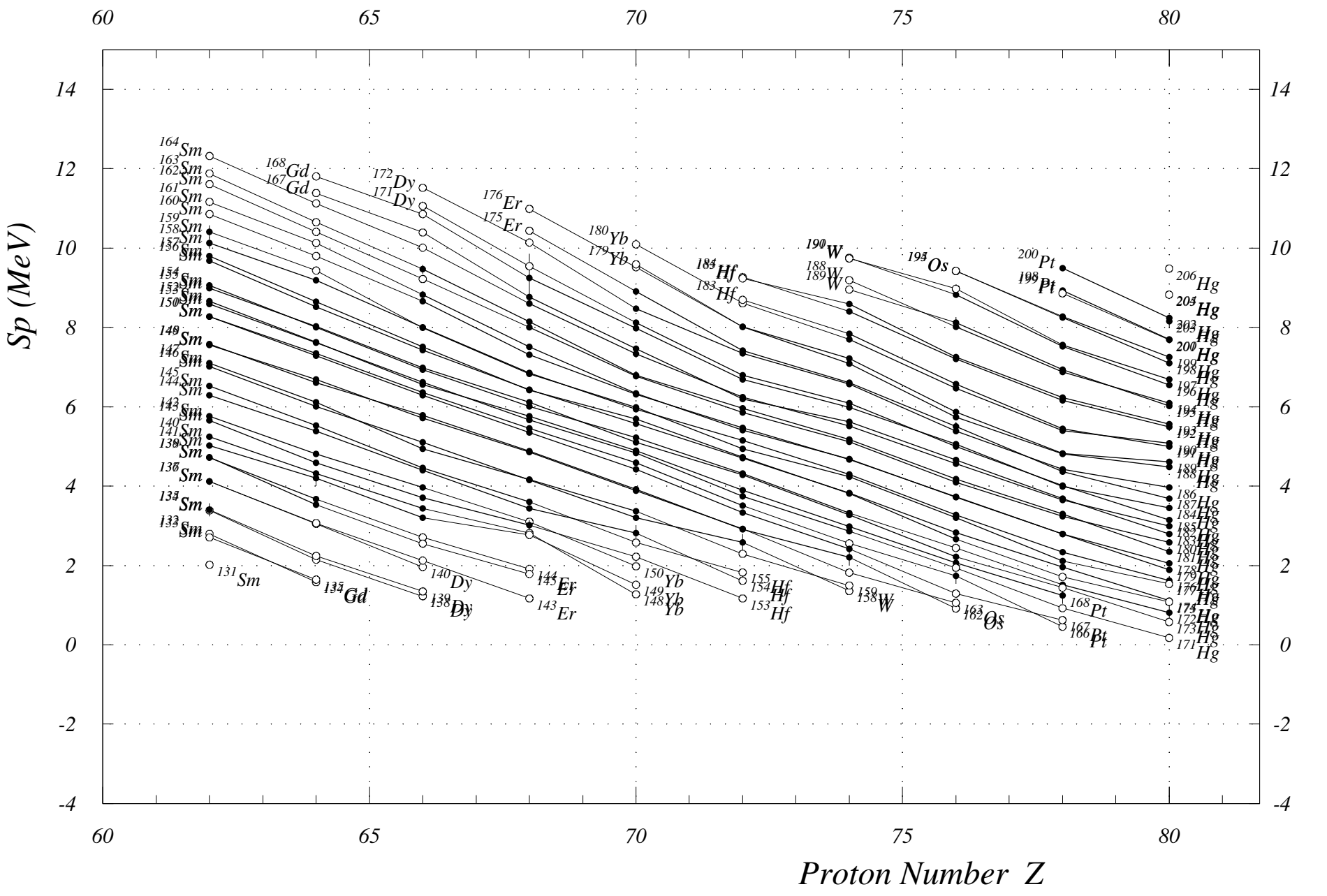


Fig. 4. One-Proton Sep. Energies (even Z) Z = 47 to 65
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sp (MeV)
Proton Number Z
45
50
55
60
65
0
5
10
15
20
Cd
Sn
Te
Xe
Ba
Ce
Nd
Sm
Gd

Fig. 5. One-Proton Sep. Energies (even Z) Z = 62 to 80

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



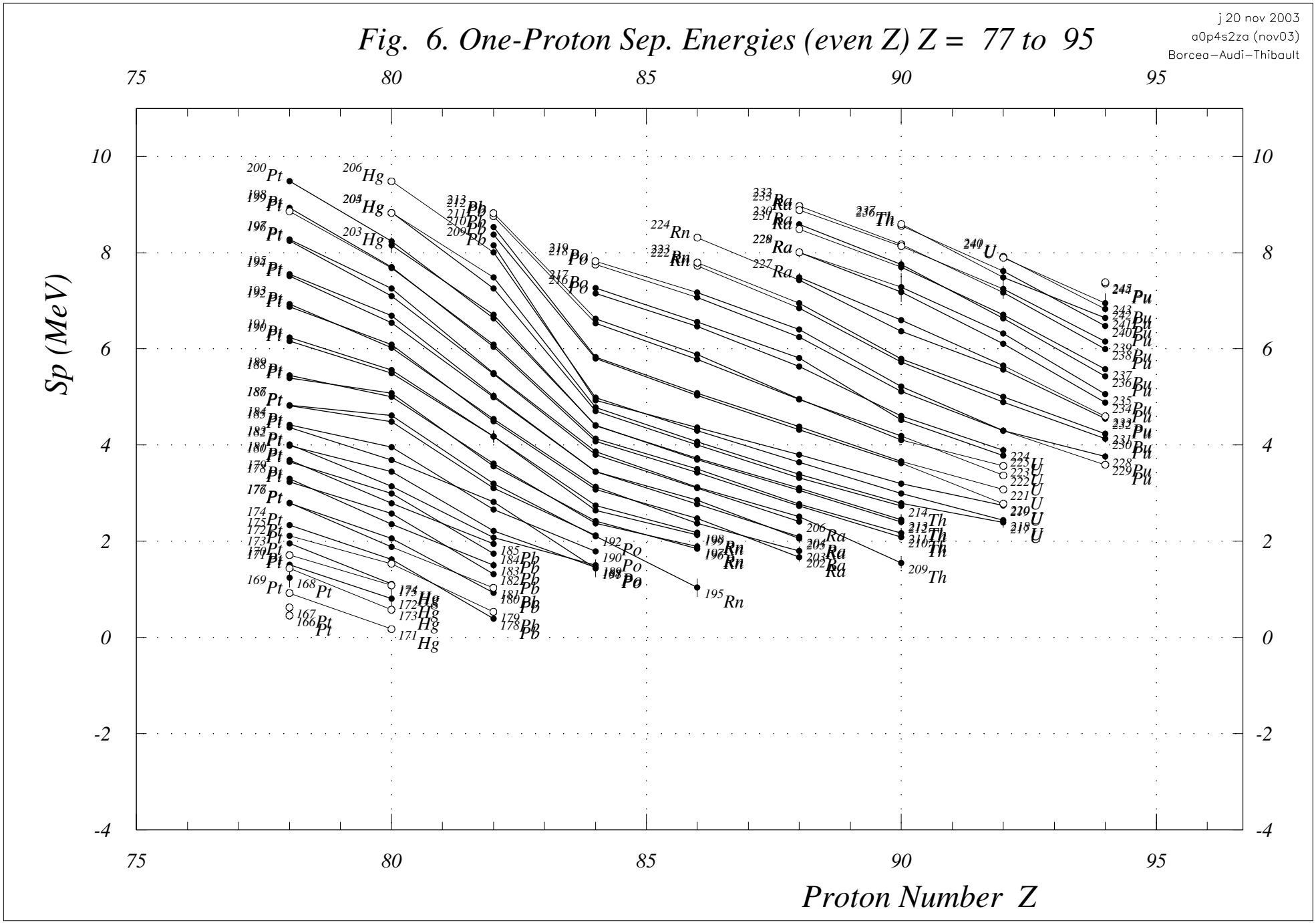
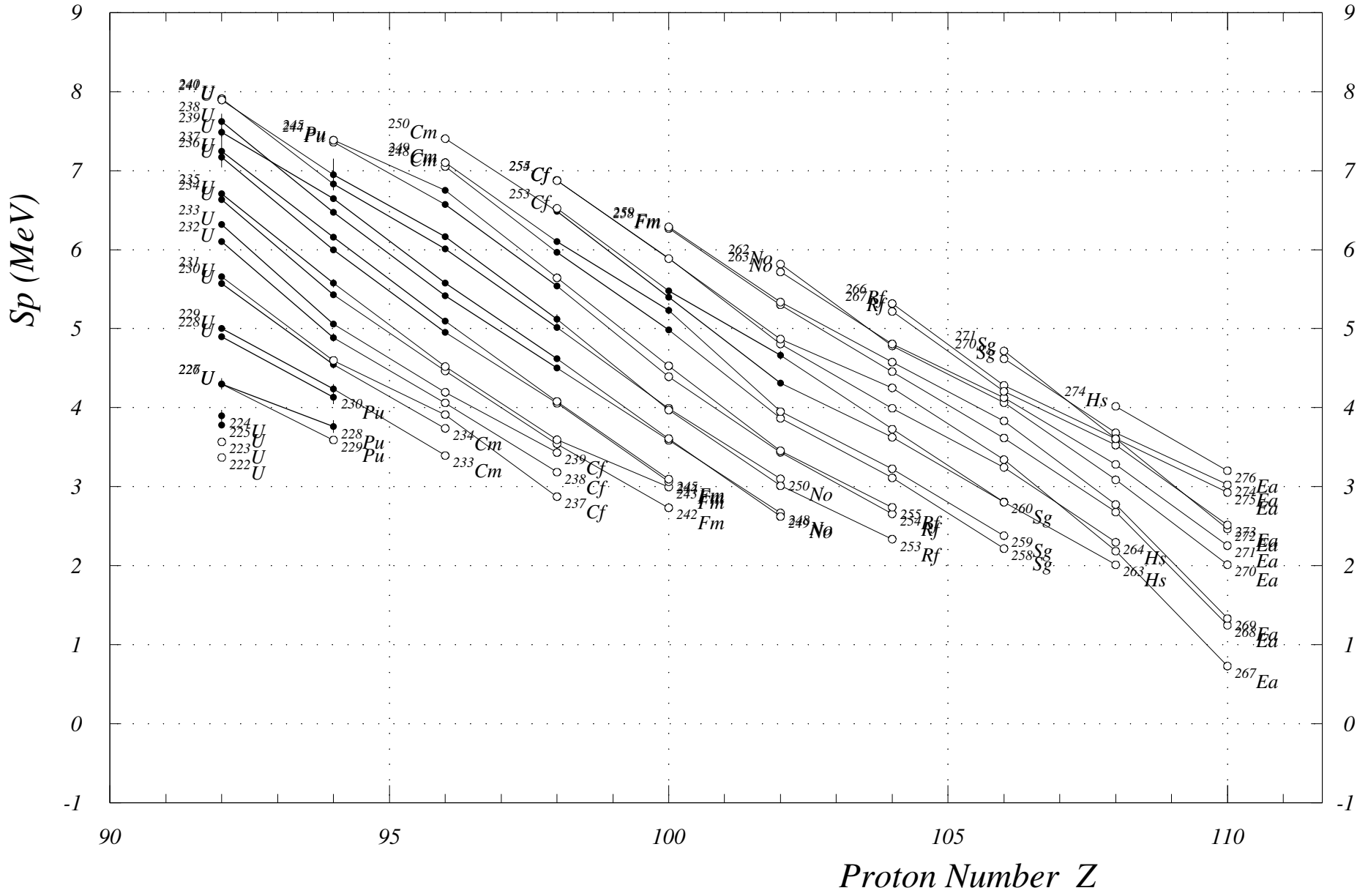


Fig. 6. One-Proton Sep. Energies (even Z) Z = 77 to 95
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sp (MeV)
Proton Number Z
75
80
85
90
95
10
8
6
4
2
0
-2
-4
200Pt
206Hg
205Hg
203Hg
213Pb
212Pb
211Pb
210Pb
209Pb
224Rn
222Rn
219Po
218Po
217Po
216Po
233Ra
232Ra
231Ra
230Ra
229Ra
227Ra
237Th
236Th
240U
243Pu
242Pu
241Pu
240Pu
239Pu
238Pu
237Pu
236Pu
235Pu
234Pu
233Pu
232Pu
231Pu
230Pu
229Pu
228Pu
224U
223U
222U
221U
220U
219U
214Th
213Th
212Th
211Th
210Th
209Th
206Ra
205Ra
203Ra
202Ra
198Rn
197Rn
196Rn
195Rn
192Po
190Po
189Po
185Pb
184Pb
183Pb
182Pb
181Pb
180Pb
179Pb
178Pb
177Pb
176Pb
175Pb
174Pb
173Pb
172Pb
171Pb
198Pt
197Pt
196Pt
195Pt
194Pt
193Pt
192Pt
191Pt
190Pt
189Pt
188Pt
187Pt
186Pt
185Pt
184Pt
183Pt
182Pt
181Pt
180Pt
179Pt
178Pt
177Pt
176Pt
175Pt
174Pt
173Pt
172Pt
171Pt
170Pt
169Pt
168Pt
167Pt
166Pt
174Hg
173Hg
172Hg
171Hg

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

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



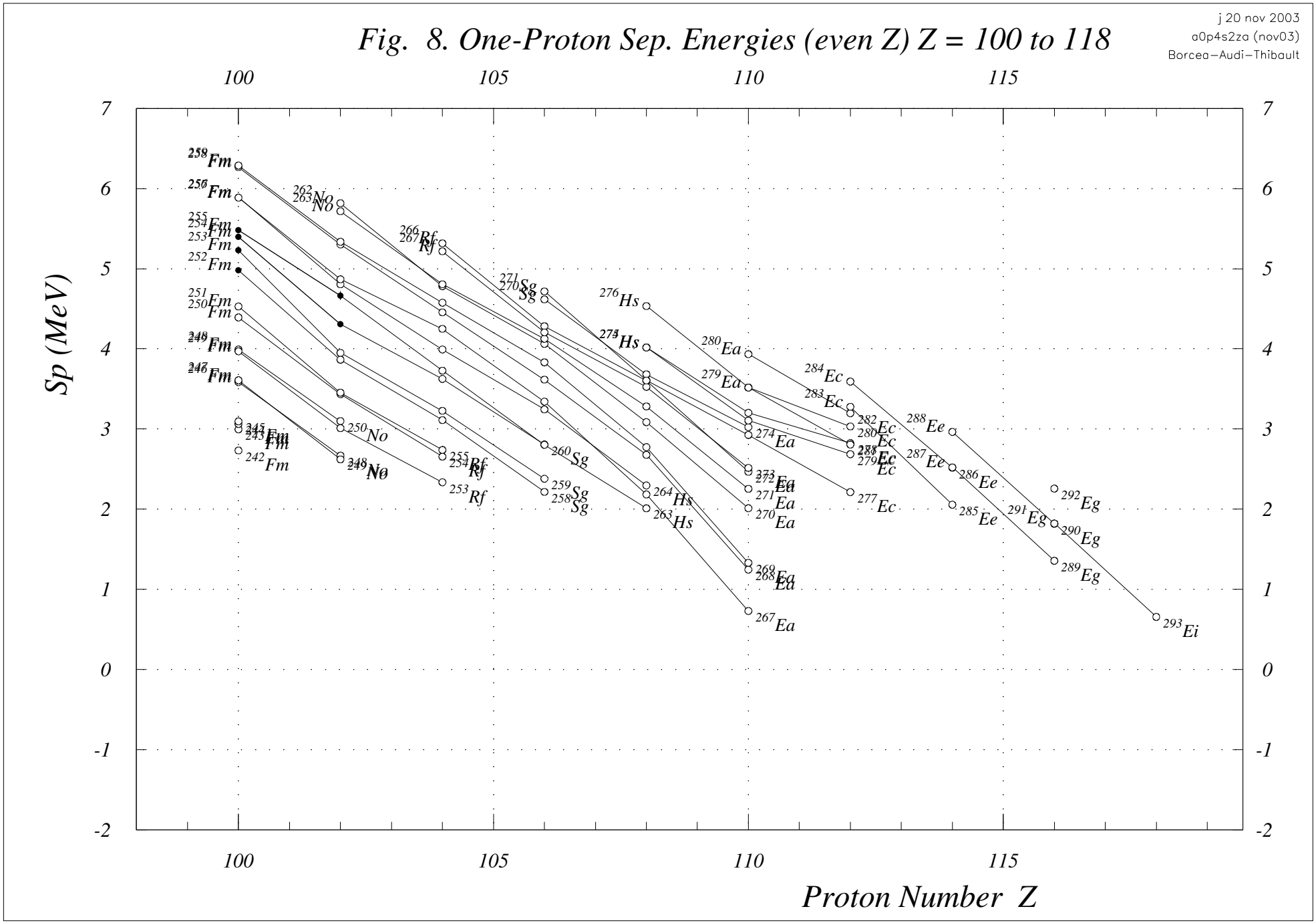


Fig. 8. One-Proton Sep. Energies (even Z) Z = 100 to 118
j 20 nov 2003
a0p4s2za (nov03)
Borcea–Audi–Thibault
Sp (MeV)
Proton Number Z
100
105
110
115
7
6
5
4
3
2
1
0
-1
-2
258Fm
256Fm
255Fm
254Fm
253Fm
252Fm
251Fm
250Fm
248Fm
247Fm
246Fm
245Fm
244Fm
243Fm
242Fm
262No
263No
250No
248No
266Rf
267Rf
255Rf
254Rf
253Rf
271Sg
270Sg
260Sg
259Sg
258Sg
276Hs
275Hs
264Hs
263Hs
280Ea
279Ea
274Ea
273Ea
272Ea
271Ea
270Ea
269Ea
268Ea
267Ea
284Ec
283Ec
282Ec
280Ec
279Ec
277Ec
288Ee
287Ee
286Ee
285Ee
292Eg
291Eg
290Eg
289Eg
293Ei