

## Publications scientifiques

### 1 Thèse

Etude expérimentale de la désintégration des mésons charmés  $D^0$ ,  $D^\pm$  et  $D_S^\pm$  au SPS. A. Buys, Dissertation de doctorat. Université de Mons-Hainaut, 1992, pp. 118.

### 2 Publications dans des revues à référence internationale

#### 2.1 WA82

1. Results on heavy quark selection through an impact parameter trigger. M. Adamovich *et al.* (Collaboration WA82), IEEE Trans. Nucl. Sci. **37** (1990) 236 – 240.
2. Charm hadroproduction with an impact parameter trigger. M. Adamovich *et al.* (Collaboration WA82), Nucl. Phys. **B** (Proc. Suppl.) **16** (1990) 302 – 303.
3. A microstrip vertex detector for studying charm hadroproduction. M. Adamovich *et al.* (Collaboration WA82), Nucl. Instr. and Meth. in Phys. Res. **A** **309** (1991) 401 – 410.
4. A study of the semileptonic decay  $D^+ \rightarrow \bar{K}^{*0} e^+ \nu_e$ . M. Adamovich *et al.* (Collaboration WA82), Phys. Lett. **B** **268** (1991) 142 – 144.
5. Measurement of relative branching fractions of  $D^0$  Cabibbo-suppressed decays. M. Adamovich *et al.* (Collaboration WA82), Phys. Lett. **B** **280** (1992) 163 – 168.
6. Nuclear dependence of charm production by a 340 GeV  $\pi^-$  beam. M. Adamovich *et al.* (Collaboration WA82), Phys. Lett. **B** **284** (1992) 453 – 456.
7. Results on charm physics from WA82. M. Adamovich *et al.* (Collaboration WA82), Nucl. Phys. **B** (Proc. Suppl.) **27** (1992) 212 – 218.
8. Measurement of relative branching fractions for  $D^+ \rightarrow K^- K^+ K^+$  and  $D_S^+ \rightarrow \pi^- \pi^+ \pi^+$  decays. M. Adamovich *et al.* (Collaboration WA82), Phys. Lett. **B** **305** (1993) 177 – 181.
9. Study of  $D^+$  and  $D^-$  Feynman's  $x$  distributions in  $\pi^-$  nucleus interactions at the SPS. M. Adamovich *et al.* (Collaboration WA82), Phys. Lett. **B** **305** (1993) 402 – 406.
10. Results on charmed meson decay from the WA82 experiment at the CERN OMEGA spectrometer. A. Buys *et al.* (Collaboration WA82), Nuovo Cimento **A** **107** (1994) 1953 – 1958.

#### 2.2 Détecteurs RICH

1. The Ring Imaging Cherenkov detector of DELPHI. W. Adam *et al.*, Nucl. Instr. and Meth. in Phys. Res. **A** **343** (1994) 68 – 73.
2. Performance of the Barrel Ring Imaging Cherenkov counter of DELPHI. G. van Apeldoorn *et al.*, IEEE Trans. Nucl. Sci. **41** (1994) 866 – 870.
3. Operational experience with the  $4\pi$  Ring Imaging Cherenkov Detector of DELPHI. W. Adam *et al.*, Nucl. Instr. and Meth. in Phys. Res. **A** **360** (1995) 416 – 422.
4. The Ring Imaging Cherenkov Detectors of DELPHI. W. Adam *et al.*, IEEE Trans. Nucl. Sci. **42** (1995) 499 – 504.
5. Performance of the Ring Imaging Cherenkov Detector of DELPHI. W. Adam *et al.*, Nucl. Instr. and Meth. in Phys. Res. **A** **367** (1995) 233 – 239.
6. RICH in operating experiments. A. Buys, Nucl. Instr. and Meth. in Phys. Res. **A** **371** (1996) 1 – 7.

7. Alignment and Cherenkov angle resolution of the DELPHI RICH. W. Adam, O. Botner, A. Buys, E. Dahl-Jensen, S. Haider, W.Hao, N. Kjaer, J. Medbo and B.S. Nielsen, Nucl. Instr. and Meth. in Phys. Res. **A 371** (1996) 228 – 231.
8. Current achievements of the DELPHI Ring Imaging Cherenkov detector. W. Adam *et al.*, Nucl. Instr. and Meth. in Phys. Res. **A 371** (1996) 12 – 15.
9. Monitoring of ageing of the DELPHI Barrel RICH MWPC's. G. van Apeldoorn, C. Bourdarios, A. Buys, M. Dracos, P. Juillot, N. Kjaer and D.Z. Toet, Nucl. Instr. and Meth. in Phys. Res. **A 371** (1996) 61 – 63.
10. Performance of the DELPHI Detector. P. Abreu *et al.* (Collaboration DELPHI), Nucl. Instr. and Meth. in Phys. Res. **A 378** (1996) 57 – 100.

### 2.3 DELPHI

1. Measurement of the  $B^0 - \overline{B}^0$  mixing using the average electric charge of hadron-jets in  $Z^0$ -decays. P. Abreu *et al.* (Collaboration DELPHI), Phys. Lett. **B 322** (1994) 459 – 472.
2. Interference of neutral kaons in the hadronic decays of the  $Z^0$ . P. Abreu *et al.* (Collaboration DELPHI), Phys. Lett. **B 323** (1994) 242 – 252.
3. Production rate and decay lifetime measurements of  $B_S^0$  mesons at LEP using  $D_S$  and  $\phi$  mesons. P. Abreu *et al.* (Collaboration DELPHI), Zeit. Phys. **C 61** (1994) 407 – 419.
4. A measurement of the  $B_S^0$  meson mass. P. Abreu *et al.* (Collaboration DELPHI), Phys. Lett. **B 324** (1994) 500 – 508.
5. Measurement of the  $e^+e^- \rightarrow \gamma\gamma(\gamma)$  cross section at LEP energies. P. Abreu *et al.* (Collaboration DELPHI), Phys. Lett. **B 327** (1994) 386 – 396.
6. Measurements of the lineshape of the  $Z^0$  and determination of electroweak parameters from its hadronic and leptonic decays. P. Abreu *et al.* (Collaboration DELPHI), Nucl. Phys. **B 417** (1994) 3 – 57.
7. Improved measurements of cross sections and asymmetries at the  $Z^0$  resonance. P. Abreu *et al.* (Collaboration DELPHI), Nucl. Phys. **B 418** (1994) 403 – 427.
8. Measurement of  $B^0 - \overline{B}^0$  mixing parameter in DELPHI. P. Abreu *et al.* (Collaboration DELPHI), Phys. Lett. **B 332** (1994) 488 – 500.
9. Study of hard scattering processes in multihadron production from  $\gamma\gamma$  collisions at LEP. P. Abreu *et al.* (Collaboration DELPHI), Zeit. Phys. **C 62** (1994) 357 – 365.
10. A precision measurement of the average lifetime of B hadrons. P. Abreu *et al.* (Collaboration DELPHI), Zeit. Phys. **C 63** (1994) 3 – 15.
11. Invariant mass dependence of particle correlations in hadronic final states from the decay of the  $Z^0$ . P. Abreu *et al.* (Collaboration DELPHI), Zeit. Phys. **C 63** (1994) 17 – 28.
12. Charged kaon production in tau decays at LEP. P. Abreu *et al.* (Collaboration DELPHI), Phys. Lett. **B 334** (1994) 435 – 449.
13. Search for the standard model Higgs boson in  $Z^0$  decays. P. Abreu *et al.* (Collaboration DELPHI), Nucl. Phys. **B 421** (1994) 3 – 37.
14. Search for pair-produced heavy scalars in  $Z^0$  decays. P. Abreu *et al.* (Collaboration DELPHI), Zeit. Phys. **C 64** (1994) 183 – 193.
15. Measurement of time dependent  $B_d^0 - \overline{B}_d^0$  mixing. P. Abreu *et al.* (Collaboration DELPHI), Phys. Lett. **B 338** (1994) 409 – 420.
16.  $J/\psi$  production in the hadronic decays of the  $Z$ . P. Abreu *et al.* (Collaboration DELPHI), Phys. Lett. **B 341** (1994) 109 – 122.

17. First evidence of hard scattering processes in single tagged  $\gamma\gamma$  collisions. P. Abreu *et al.* (Collaboration DELPHI), Phys. Lett. **B 342** (1995) 402 – 416.
18. Observation of orbitally excited  $B$  mesons. P. Abreu *et al.* (Collaboration DELPHI), Phys. Lett. **B 345** (1995) 598 – 608.
19. Measurement of the  $\Gamma_{b\bar{b}}/\Gamma_{had}$  branching ratio of the  $Z$  by double hemisphere tagging. P. Abreu *et al.* (Collaboration DELPHI), Zeit. Phys. **C 65** (1995) 555 – 568.
20. Measurement of the Forward-Backward Asymmetry of  $e^+e^- \rightarrow Z \rightarrow b\bar{b}$  using prompt leptons and a lifetime tag. P. Abreu *et al.* (Collaboration DELPHI), Zeit. Phys. **C 65** (1995) 569 – 585.
21. Production characteristics of  $K^0$  and light meson resonances in hadronic decays of the  $Z^0$ . P. Abreu *et al.* (Collaboration DELPHI), Zeit. Phys. **C 65** (1995) 587 – 602.
22. A study of radiative muon-pair events at  $Z^0$  energies and limits on an additional  $Z'$  gauge boson. P. Abreu *et al.* (Collaboration DELPHI), Zeit. Phys. **C 65** (1995) 603 – 618.
23. Production of charged particles,  $K_S^0$ ,  $K^\pm$ ,  $p$  and  $\Lambda$  in  $Z \rightarrow b\bar{b}$  events and in the decay of  $b$  hadrons. P. Abreu *et al.* (Collaboration DELPHI), Phys. Lett. **B 347** (1995) 447 – 466.
24. Measurement of  $\frac{\Gamma_{b\bar{b}}}{\Gamma_{had}}$  using impact parameter measurements and lepton identification. P. Abreu *et al.* (Collaboration DELPHI), Zeit. Phys. **C 66** (1995) 323 – 339.
25. Measurement of the Forward-Backward Asymmetry of charm and bottom quarks at the  $Z$  pole using  $D^{*\pm}$  mesons. P. Abreu *et al.* (Collaboration DELPHI), Zeit. Phys. **C 66** (1995) 341 – 354.
26. First measurement of the strange quark asymmetry at the  $Z^0$  peak. P. Abreu *et al.* (Collaboration DELPHI), Zeit. Phys. **C 67** (1995) 1 – 13.
27. Search for heavy neutral Higgs bosons in two-doublet models. P. Abreu *et al.* (Collaboration DELPHI), Zeit. Phys. **C 67** (1995) 69 – 79.
28. Measurements of the  $\tau$  polarisation in  $Z^0$  decays. P. Abreu *et al.* (Collaboration DELPHI), Zeit. Phys. **C 67** (1995) 183 – 201.
29. Inclusive  $K^\pm$  and  $p/\bar{p}$  production in  $Z^0$  decays. P. Abreu *et al.* (Collaboration DELPHI), Nucl. Phys. **B 444** (1995) 3 – 26.
30. Observation of short range three-particle correlations in  $e^+e^-$  annihilations at LEP energies. P. Abreu *et al.* (Collaboration DELPHI), Phys. Lett. **B 355** (1995) 415 – 424.
31. Strange baryon production in  $Z$  hadronic decays. P. Abreu *et al.* (Collaboration DELPHI), Zeit. Phys. **C 67** (1995) 543 – 553.
32. A measurement of  $B^+$  and  $B^0$  lifetimes using  $\overline{D}l^+$  events. P. Abreu *et al.* (Collaboration DELPHI), Zeit. Phys. **C 68** (1995) 13 – 23.
33.  $B^*$  production in  $Z$  decays. P. Abreu *et al.* (Collaboration DELPHI), Zeit. Phys. **C 68** (1995) 353 – 362.
34. Lifetime of charged and neutral  $B$  hadrons using event topology. W. Adam *et al.* (Collaboration DELPHI), Zeit. Phys. **C 68** (1995) 363 – 374.
35. Lifetime and production rate of beauty baryons from  $Z$  decays. P. Abreu *et al.* (Collaboration DELPHI), Zeit. Phys. **C 68** (1995) 375 – 390.
36. Search for exclusive charmless  $B$  meson decays with the DELPHI detector at LEP. P. Abreu *et al.* (Collaboration DELPHI), Phys. Lett. **B 357** (1995) 255 – 266.
37. A Measurement of the  $\tau$  Leptonic Branching Fractions. P. Abreu *et al.* (Collaboration DELPHI), Phys. Lett. **B 357** (1995) 715 – 724.

38. Production of strange B-baryons decaying into  $\Xi^\mp - \ell^\mp$  pairs at LEP.  
P. Abreu *et al.* (Collaboration DELPHI), *Zeit. Phys.* **C 68** (1995) 541 – 553.
39. Upper limits on the branching ratios  $\tau \rightarrow \mu\gamma$  and  $\tau \rightarrow e\gamma$ .  
P. Abreu *et al.* (Collaboration DELPHI), *Phys. Lett.* **B 359** (1995) 411 – 421.
40. Study of prompt photon production in hadronic  $Z^0$  decays. P. Abreu *et al.*  
(Collaboration DELPHI), *Zeit. Phys.* **C 69** (1995) 1 – 13.
41. Measurement of  $\Delta^{++}(1232)$  production in hadronic Z decays.  
P. Abreu *et al.* (Collaboration DELPHI), *Phys. Lett.* **B 361** (1995) 207 – 220.
42. A measurement of the photon structure function  $F_2^\gamma$  at an average  $Q^2$  of  $12 \text{ GeV}^2/c^4$ .  
P. Abreu *et al.* (Collaboration DELPHI), *Zeit. Phys.* **C 69** (1996) 223 – 233.
43. Measurement of inclusive  $\pi^0$  production in  $Z^0$  decays. W. Adam *et al.* (Collaboration  
DELPHI), *Zeit. Phys.* **C 69** (1996) 561 – 573.
44. Search for promptly produced heavy quarkonium states in hadronic Z decays. P.  
Abreu *et al.* (Collaboration DELPHI), *Zeit. Phys.* **C 69** (1996) 575 – 583.
45. A precise measurement of the Tau lepton lifetime. P. Abreu *et al.* (Collaboration  
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46. Charged particle multiplicity in  $e^+e^-$  interactions at  $\sqrt{s} = 130 \text{ GeV}$ . P. Abreu *et al.*  
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47. Search for exclusive decays of the  $\Lambda_b$  baryon and measurement of its mass. P. Abreu  
*et al.* (Collaboration DELPHI), *Phys. Lett.* **B 374** (1996) 351 – 361.
48. Updated precision measurement of the average lifetime of B hadrons. P. Abreu *et al.*  
(Collaboration DELPHI), *Phys. Lett.* **B 377** (1996) 195 – 204.
49. First measurement of  $f_2'(1525)$  production in  $Z^0$  hadronic decays P. Abreu *et al.*  
(Collaboration DELPHI), *Phys. Lett.* **B 379** (1996) 309 – 318.
50. Kaon interference in the hadronic decays of the  $Z^0$ . P. Abreu *et al.* (Collaboration  
DELPHI), *Phys. Lett.* **B 379** (1996) 330 – 340.
51. Search for anomalous production of single photons at  $\sqrt{s} = 130$  and  $136 \text{ GeV}$ . P.  
Abreu *et al.* (Collaboration DELPHI), *Phys. Lett.* **B 380** (1996) 471 – 479.
52. Study of radiative leptonic events with hard photons and search for excited charged  
leptons at  $\sqrt{s} = 130\text{-}136 \text{ GeV}$ . P. Abreu *et al.* (Collaboration DELPHI), *Phys. Lett.*  
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53. Search for the lightest chargino at  $\sqrt{s} = 130$  and  $136 \text{ GeV}$ . P. Abreu *et al.* (Collab-  
oration DELPHI), *Phys. Lett.* **B 382** (1996) 323 – 336.
54. Energy dependence of the differences between the quark and gluon jet fragmenta-  
tion. P. Abreu *et al.* (Collaboration DELPHI), *Zeit. Phys.* **C 70** (1996) 179 – 195.
55. Production of  $\Sigma^0$  and  $\Omega^-$  in Z decays. W. Adam *et al.* (Collaboration DELPHI),  
*Zeit. Phys.* **C 70** (1996) 371 – 381.
56. Measurement of the partial decay width  $R_b = \Gamma_{b\bar{b}}/\Gamma_{had}$  of the Z with the DELPHI  
detector at LEP. P. Abreu *et al.* (Collaboration DELPHI), *Zeit. Phys.* **C 70** (1996)  
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57. Mean lifetime of the  $B_s^0$  meson. P. Abreu *et al.* (Collaboration DELPHI), *Zeit. Phys.*  
**C 71** (1996) 11 – 30.
58. Determination of the average lifetime of b-baryons. P. Abreu *et al.* (Collaboration  
DELPHI), *Zeit. Phys.* **C 71** (1996) 199 – 210.
59. Determination of  $|V_{cb}|$  from the semileptonic decay  $B^0 \rightarrow D^{*-}\ell^+\nu$ . P. Abreu *et al.*  
(Collaboration DELPHI), *Zeit. Phys.* **C 71** (1996) 539 – 553.
60. Measurement of the  $B_d^0$  oscillation frequency using kaons, leptons and jet charge. P.  
Abreu *et al.* (Collaboration DELPHI), *Zeit. Phys.* **C 72** (1996) 17 – 30.

61. First study of the interference between initial and final state radiation at the  $Z$  resonance. P. Abreu *et al.* (Collaboration DELPHI), *Zeit. Phys.* **C 72** (1996) 31 – 38.
62. Search for high mass  $\gamma\gamma$  resonances in  $e^+e^- \rightarrow \ell^+\ell^-\gamma\gamma$ ,  $\nu\bar{\nu}\gamma\gamma$  and  $q\bar{q}\gamma\gamma$  at LEP I. P. Abreu *et al.* (Collaboration DELPHI), *Zeit. Phys.* **C 72** (1996) 179 – 190.
63. Study of rare  $b$  decays with the DELPHI detector at LEP. W. Adam *et al.* (Collaboration DELPHI), *Zeit. Phys.* **C 72** (1996) 207 – 220.  
Charged particle multiplicity in  $e^+e^-$  interactions at  $\sqrt{s} = 130$  GeV.
64. Search for pair production of heavy objects in 4-jet events at  $\sqrt{s} = 130$ -136 GeV. W. Adam *et al.* (Collaboration DELPHI), *Zeit. Phys.* **C 73** (1996) 1 – 9.
65. Tuning and test of fragmentation models based on identified particles and precision event shape data. P. Abreu *et al.* (Collaboration DELPHI), *Zeit. Phys.* **C 73** (1996) 11 – 59.
66. Measurement of inclusive  $K^{*0}(892)$ ,  $\phi(1020)$  and  $K_2^{*0}(1430)$  production in hadronic  $Z$  decays. P. Abreu *et al.* (Collaboration DELPHI), *Zeit. Phys.* **C 73** (1996) 61 – 72.
67. Search for neutralinos, scalar leptons and scalar quarks in  $e^+e^-$  interactions at  $\sqrt{s} = 130$  and 136 GeV. P. Abreu *et al.* (Collaboration DELPHI), *Phys. Lett.* **B 387** (1996) 651 – 666.
68. An upper limit for  $Br(Z^0 \rightarrow ggg)$  from symmetric 3-jet  $Z^0$  hadronic decays P. Abreu *et al.* (Collaboration DELPHI), *Phys. Lett.* **B 389** (1996) 405 – 415.
69. Measurement of event shape and inclusive distributions at  $\sqrt{s} = 130$  and 136 GeV. P. Abreu *et al.* (Collaboration DELPHI), *Zeit. Phys.* **C 73** (1997) 229 – 242.
70. Search for lepton flavour number violating  $Z^0$ -decays. P. Abreu *et al.* (Collaboration DELPHI), *Zeit. Phys.* **C 73** (1997) 243 – 251.
71. A precise measurement of the  $B_d^0$  meson lifetime using a new technique. P. Abreu *et al.* (Collaboration DELPHI), *Zeit. Phys.* **C 74** (1997) 19 – 32.
72. Search for new phenomena using single photon events at LEP1. P. Abreu *et al.* (Collaboration DELPHI), *Zeit. Phys.* **C 74** (1997) 577 – 586.

### 3 Abstracts de conférences

1. Results on charmed meson decay from the WA82 experiment at the CERN Omega spectrometer. A. Buys, Abstracts de la réunion de la Société Belge de Physique (Leuven, 27-28 mai 1993, session orale HE-03), 47 – 47.
2. The RICH detector of DELPHI and its use for studying charm physics. A. Buys, Abstracts de la réunion de la Société Belge de Physique (Mons, 26-27 mai 1994, session poster HE-7).

### 4 Comptes rendus de conférences internationales

1. First (and preliminary) results from the charm hadroproduction experiment WA82. M. Adamovich *et al.* (Collaboration WA82), Contribution au XIX<sup>ème</sup> Symposium International MULTIPARTICLE DYNAMICS, Arles, France, 13-17 juin 1988. *Multiparticle dynamics 1988*, édité par D. Schiff et J. Tran Thanh Van, Ed. World Sci., Singapour (1988) 171 – 184.
2. Preliminary results on  $D^\pm$  production properties in the interaction of 340 GeV/ $c$   $\pi^-$  on a target of  $Si$  and  $W$ . M. Adamovich *et al.* (Collaboration WA82), Contribution aux XXIV<sup>èmes</sup> Rencontres de Moriond (Session hadronique), Les Arcs, France, 12-18 mars 1989. *New results in hadronic interactions*, édité par J. Tran Thanh Van, Ed. Frontières, Gif-sur-Yvette (1989) 367 – 373.

3. Charm hadroproduction with an impact parameter trigger. M. Adamovich *et al.* (Collaboration WA82), CERN-EP/89 – 123 20-09-1989, pp. 14. Présenté au Symposium International 1989 de Physique des quarks lourds, Université de Cornell, Ithaca, USA, 13 - 17 juin 1989. *Heavy quark Physics*, édité par P. S. Drell et D. L. Rubin, AIP Conference Proceedings No. 196 (American Institute of Physics, New York, 1989) 285 – 298.
4. Preliminary results on charm production by 340 GeV/c  $\pi^-$  on a target of *Si* and *W*. F. Grard *et al.* (Collaboration WA82), CERN-PRE/90 – 004, pp. 8. Présenté au III<sup>èmes</sup> Symposium International sur les expériences de haute énergie et méthodes, HEXAM'89, Bechyne, Tchécoslovaquie, 25-30 juin 1989. Proceedings édités par P. Reimer, M. Suk et V. Simák, Prague (1989) 27 – 34.
5. New results on charm hadroproduction. M. Adamovich *et al.* (Collaboration WA82), Contribution aux XXVI<sup>èmes</sup> Rencontres de Moriond (Session hadronique), Les Arcs, France, 17-23 mars 1991. '91 *High energy hadronic interactions*, édité par J. Tran Thanh Van, Ed. Frontières, Gif-sur-Yvette (1991) 11 – 16.
6. New results on the hadroproduction of charm from the WA82 experiment at the CERN Omega Spectrometer. M. Adamovich *et al.* (Collaboration WA82), CERN-PRE/91 – 055. Présenté à la IV<sup>ème</sup> Conférence internationale HADRON'91, Maryland, USA, 12-16 août 1991. Proceedings édités par S. Oneda et D.C. Peaslee, World Sci., Singapour (1992) 605 – 609.
7. New results from charm hadroproduction experiment WA82. A. Buys *et al.* (Collaboration WA82), CERN-PRE/92 – 016. Contribution aux XXVII<sup>èmes</sup> Rencontres de Moriond. Les Arcs, France, 22-28 mars 1992. *Perturbative QCD and hadronic interactions*, édité par J. Tran Thanh Van, Ed. Frontières, Gif-sur-Yvette (1992) 293 – 296.
8. Results on charm hadroproduction from CERN experiment WA82. M. Adamovich *et al.* (Collaboration WA82), CERN-PRE/92 – 046, pp. 23. Contribution à la XXVI<sup>ème</sup> conférence internationale sur la physique des hautes énergies, Dallas, USA, 6-12 août 1992.
9. RICH detectors in operating experiments. A. Buys, note DELPHI 95-163 (RICH 85), 20-11-1995, pp. 19. Présenté au second workshop sur les détecteurs RICH, Uppsala, Suède, 12-16 juin 1995. A paraître dans *Cherenkov effect in science and life* (en Russe), édité par A.N. Gorbunov, Nauka (Moscou), 1996.

## 5 Rapports internes

### 5.1 C.E.R.N.

1. High statistics study of charm hadroproduction using an impact parameter trigger (WA82). J.-L. Bailly *et al.* (Collaboration WA82), CERN/SPSC 87 – 01 SPSC/P 218 Add 1 (1987), pp. 26.
2. Proposal for a new Hyperon beam experiment at the CERN SPS using the Omega facility. A. Forino *et al.* (Collaboration WA89), CERN/SPSC 87 – 43 SPS/P 233 (1987), pp. 59.
3. Proposal for a New Hyperon Beam Experiment at the CERN - SPS Using the Omega Facility. A. Forino *et al.* (Collaboration WA89), CERN/SPSC 88 – 6 SPS/P 233/S (1988), pp. 2.
4. Measurement of beauty particle lifetimes and hadroproduction cross-section. M. Adamovich *et al.* (Collaboration WA92), CERN/SPSC 90 – 10 SPS/P 251 (1990), pp. 72.

## 5.2 Physique Nucléaire et des Particules Élémentaires (U.M.H.)

1. Particle identification in WA82. A. Buys, note interne PNPE-296, Université de Mons-Hainaut, 6-07-90, pp. 39.
2. T<sub>E</sub>X dans le service de PPE (1-2). A. Buys, note interne PNPE-297, PNPE-298 Université de Mons-Hainaut, 6-05-91.
3. RICH efficiency measurements for WA82. First results on non-leptonic charm decays and perspectives. A. Buys, note interne PNPE-299, Université de Mons-Hainaut, 28-10-91, pp. 36.
4. Design of proportional drift chamber for use in a cosmic hodoscope by mean of the GARFIELD simulation program. E. Daubie, M. Chevry, F. Defontaines, F. Gard, J. Kesteman, F. Lequeux, A. Buys, O. Pingot, note interne PNPE-300, Université de Mons-Hainaut, 6-11-91, pp. 10.
5. Measurement of  $D^0$  non-leptonic relative branching ratios. A. Buys, note interne PNPE-302, Université de Mons-Hainaut, 26-11-91, pp. 14.
6. WA82 MINIDST format description. A. Buys, note interne PNPE-306, Université de Mons-Hainaut, 9-03-92, pp. 6.
7. New results from charm hadroproduction experiment WA82. A. Buys, note interne PNPE-307, Université de Mons-Hainaut, mars 1992, pp. 4.
8. Mesure de rapports de branchement relatifs des mésons  $D^+$  et  $D_S^+$  par WA82 au SPS (CERN). A. Buys, note interne PNPE-312, Université de Mons-Hainaut, 1-02-93, pp. 10.

## 6 Divers

1. Etude de quelques inégalités de corrélation pour des systèmes ferromagnétiques. A. Buys, Mémoire de licence. Université de Mons-Hainaut, 1984.
2. Elaboration sur IBM PC d'un logiciel d'aide à la décision en matière d'économies d'énergie dans les bâtiments. A. Buys, Mémoire pour le certificat approfondi en informatique. Université de Mons-Hainaut, 1986.