

V. Flaminio: Publications on Journals

a) Bubble chamber experiments CERN: 1965-1967

1. M.Deutschmann et al.; "Single π^0 production by 8 GeV/c positive pions and possible enhancements in the $(\pi^+\pi^0)$ system".
Physics Letters 18, 351 (1965)
2. M.Deutschmann et al.; "Slope of $d\sigma/dt$ distributions in quasi-two-body interactions of 8 GeV/c positive pions".
Physics Letters 19, 608 (1966)
3. M.Deutschmann et al.; "Rare decay modes of ρ, A_1 and A_2 mesons".
Physics Letters 20, 82 (1966)
4. M.Deutschmann et al.; "Evidence against the interpretation of the A_1 enhancement as a kinematic effect".
Physics Letters 22, 112 (1966)
5. J.Bartsch et al.; "Observation of a $(K\pi\pi)$ resonance near 1800 MeV".
Physics Letters 22, 357 (1966)
6. F.Crijns et al.; "Decay angular distributions of resonances in two-body reactions produced by 8 GeV/c positive pions on protons".
Physics Letters 22, 533 (1966)
7. J.Bartsch et al.; "Quantum number assignement for the A_2 meson".
Physics Letters 25B, 48 (1967)
8. M.Aderholz et al.; " K^-p elastic scattering at 10 GeV/c".
Physics Letters 24B, 434 (1967)
9. Chan Hong-Mo et al.; "Double Regge analysis of high energy experiments producing three final-state particles".
Nuovo Cimento 51A, 696 (1967)

10. J.Bartsch et al.; "Analysis of the $K^*(1320)$ and L meson produced in 10 GeV/c $K^- p$ interactions".
Nuclear Physics B8, 9 (1968)
11. K.Boesebeck et al.; "Resonance production in 8 GeV/c π^+ interactions in hydrogen".
Nuclear Physics B4, 501 (1968)
12. M.Aderholz et al.; " $K^*(890)$ production in 10 GeV/c $K^- p$ interactions and comparison with absorption and Regge-pole models".
Nuclear Physics B5, 567 (1968)
13. M.Aderholz et al.; "Total and differential cross sections in 10 GeV/c $K^- p$ interactions".
Nuclear Physics B7, 111 (1968)

**b) Bubble chamber experiments
Brookhaven National Laboratory: 1967-1970**

14. D.J.Crennell et al.; "Existence of a Y^* resonance at 1616 MeV".
Phys. Rev. Lett. 21, 648 (1968)
15. J.Alitti et al.; "Evidence for a Ξ^* resonance with mass 1930 MeV".
Phys. Rev. Lett., 21, 1119 (1968)
16. J.Alitti et al.; "Strangeness $S=-2$ Baryon resonance".
Phys. Rev. Lett. 22, 79 (1969)
17. V.E.Barnes et al.; "Production of Sigma Hyperons in $K^- p$ interactions".
Phys. Rev. Lett. 22, 479 (1969)
18. V.E.Barnes et al.; "Evidence for an $(\omega\pi\pi)$ resonance in the $I=1$ state at a mass of 1695 MeV".
Phys. Rev. Lett. 23, 142 (1969)
- 19) J.Alitti et al.; "Evidence for the $(K_s K_s)$ enhancement near threshold produced by $K^- N$ reactions".
Phys. Rev. Lett. 21, 1705 (1968)

- 20) V.E.Barnes et al.; “Evidence for a $\pi\eta$ resonance at 970 MeV produced in $K^- p \rightarrow \Lambda \pi^+ \pi^-$ MM at 3.9, 4.6 and 5.0 GeV/c”.
Phys. Rev. Lett. 23, 610 (1969)
- 21) V.E.Barnes et al.; “Production of $p \pi^+ \pi^-$ enhancements from the reaction $K^- p \rightarrow K^- p \pi^+ \pi^-$ ”.
Phys. Rev. Lett. 23, 1516 (1969)
- 22) M.Aguilar-Benitez et al.; “Production of the L meson in the final state of the reaction $K^- p \rightarrow K^- \pi^+ \pi^- p$ at 4.6 GeV/c”.
Phys. Rev. Lett. 25, 54 (1970)
- 23) M.Aguilar Benitez et al.; “Observation of Σ resonances in the 1670 MeV mass region”.
Phys. Rev. Lett. 25, 58 (1970)

c) Bubble chamber experiments
Pisa-CERN: 1970-1977

- 24) C.Angelini et al.; “Experimental study of 6-prong events in $\bar{P}P$ annihilation around 1 GeV”.
Nuovo Cimento 32A, 243 (1976)
- 25) L.Bertanza et al.; “A study of the reactions $K_L^0 p \rightarrow \Lambda \pi^+$ and $K_L^0 p \rightarrow \Sigma^0 \pi^+$ in the c.m.s. energy range 1490-1700 MeV”.
Nuclear Physics B110, 1 (1976)
- 26) A.Bigi et al.; “Study of the reactions $K_L^0 p \rightarrow K_S^0 p$ in the c.m.s. energy range 1470-1700 MeV”.
Nuclear Physics B110, 25 (1976)
- 27) K.J.Peach et al.; “A study of the Dalitz plot in the decay $K_L^0 p \rightarrow \pi^+ \pi^- \pi^0$ ”.
Nuclear Physics B127, 399 (1977)

- 28) W.Cameron et al.; “ $K^0 p$ interactions in the c.m.s. energy range 1.54-1.71 GeV”.
Nuclear Physics B132, 189 (1978)
- 29) C.Angelini et al.; “Test of Multiplicity Independence of single π "mean scaled" distributions in low energy $\bar{P}P$ annihilations”.
Lett. Nuovo Cimento 18,245 (1977)

**d) $K^- p$ experiment and phenomenological analyses
Brookhaven National Laboratory: 1977-1978**

- 30) F.T.Dao et al.; “Study of quark structure functions”.
Phys. Rev. Lett. 39, 1388 (1977)
- 31) S.U.Chung et al.; “Study of $K^*(1780)$ in the reaction $K^- p \rightarrow K^- \pi^+ n$ at 6 GeV/c”.
Phys. Rev. Lett. 40, 355 (1978)
- 32) V.Flamini: “Scaling violation effects in Drell-Yan processes”.
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**e) Neutrino bubble chamber experiments and search for
neutrino oscillations
Pisa-CERN: 1978-1988**

- 33) D.Allasia et al.; “Measurement of the ratios of νn to νp charged current cross sections at high energies”.
Physics Letters 107B, 148 (1981)
- 34) D.Allasia et al.; “Proton and neutron structure functions from antineutrino interactions in deuterium”.
Physics Letters 117B, 262 (1982)
- 35) S.Barlag et al.; “Charged hadron multiplicities in high energy $\bar{\nu} n$ and $\bar{\nu} p$ interactions”.
Zeit. Phys. C - Particles and Fields 11,283 (1982)

- 36) D.Allasia et al.; "Fragmentation Functions in High Energy Neutrino and Antineutrino Deuterium Interactions".
Physics Letters 124B, 543 (1983)
- 37) D.Allasia,et al.; "Production of neutral strange particles in $\bar{\nu}_\mu$ D₂ and ν_μ D₂ charged current Interactions".
Nuclear PhysicsB, 224 ,1 (1983)
- 38) D.Allasia et al.; "Single Pion Production in Charged Current antineutrino Deuterium Interactions at High Energies".
Zeit. Phys. C - Particles and Fields 20 , 95 (1983)
- 39) D.Allasia et al.; "Measurement of the Neutral Current Coupling Constants in neutrino and antineutrino Interactions with Deuterium".
Physics Letters 133 B, 129 (1983)
- 40) D.Allasia et al.; "Measurement of the neutrino and antineutrino-Nucleon Charged-Current Total Cross Sections, and the ratio of neutrino-neutron to neutrino-proton Charged-Current Total Cross Sections".
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- 41) D.Allasia et al.; "Measurement of the Neutron and Proton Structure Functions from Neutrino and Antineutrino Scattering in Deuterium".
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- 42) A.M.Cooper et al.; "An investigation of the EMC effect using antineutrino interactions in Deuterium and Neon".
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- 43) D.Allasia et al.; "Fragmentation in neutrino and antineutrino Charged Current Interactions on Proton and Neutron".
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- 44) D.Allasia et al.; "Fragmentation into strange particles in high energy $\nu p, \nu n, \bar{\nu} p$ and $\bar{\nu} n$ interactions".
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- 45) D.Allasia et al.; “Transverse Momentum of Charged Hadrons Produced in ν and $\bar{\nu}$ Deuterium Charged Current Interactions”.
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- 46) D.Allasia et al; “ Q^2 dependence of the Proton and Neutron Structure Functions from Neutrino and Antineutrino Scattering in Deuterium”.
Zeit. Phys. C - Particles and Fields 28, 321 (1985)
- 47) D.Allasia et al.; “Inclusive ρ^0 production in antineutrino-deuteron and neutrino-deuteron charged current interactions”.
Nuclear Physics B268, 1 (1985)
- 48) D.Allasia et al.; “Search for a $\Delta(1236)$ - $\Delta(1236)$ structure of the Deuteron”.
Physics Letters, 174B, 450 (1986)
- 49) D.Allasia et al.; “Search for $\mu\pi$ mass enhancements in neutrino and antineutrino-deuterium charged-current interactions”.
Physical Review D 31, 2996 (1985)
- 50) D.Allasia et al; “Determination of the Neutral Current Coupling Constants u_L^2 , u_R^2 , d_L^2 , and d_R^2 from a Neutrino and Antineutrino Deuterium Experiment”.
Nuclear Physics B307, 1 (1988)
- 51) D.Allasia et al.; “Multiplicity distributions of charged hadrons produced in (anti)neutrino-deuterium interactions”.
Nuovo Cimento 101A, 435 (1989)
- 52) C.Angelini et al.; “New experimental limits on $\nu_\mu \rightarrow \nu_e$ oscillations”.
Physics Letters 179, 307 (1986)
- 53) Vincenzo Flaminio and Biagio Saitta; “Neutrino oscillation experiments”
Rivista del Nuovo Cimento Vol 8 (1987)

f) Data Compilations
Pisa-CERN: 1970-1992

- 54) A.Baldini,V.Flaminio,W.G.Moorhead and D.R.O.Morrison; “Total cross-sections for Reactions of High Energy Particles”.
Landolt-Bornstein, Numerical data and Functional Relationships in Science and Technology, New Series, Group I, Vol 12a and 12b, 1988.
- 55) O.P. Yushchenko et al.; “A compilation of data on e^+e^- interactions”.
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g) Statistical analyses of Physics Students Curricula
Pisa: 1988-1994

- 56) V. Flaminio; “Alcuni dati statistici relativi agli studenti immatricolati presso il corso di laurea in Fisica dell'Universita' di Pisa negli anni 1969-1988”.
Il Nuovo Saggiatore 4, 10 (1989)
Giornale di Fisica 32, 31 (1991)
- 57) V. Flaminio; “Nuovi dati statistici sugli studenti iscritti al Corso di Laurea in Fisica dell'Universita' di Pisa nel periodo 1969-1991”.
Il Nuovo Saggiatore 11, 6 (1995)

h) MACRO experiment
Pisa-Gran Sasso: 1986-1990

- 58) C. De Marzo et al.; “MACRO, a Large Area Detector at the Gran Sasso Laboratory”.
Il Nuovo Cimento vol. 9 C, 281 (1986)

- 59) M.Calicchio et al.; “The track-etch detector of the MACRO experiment”.
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- 60) M.Calicchio et al.; “The MACRO detector at the Gran Sasso Laboratory”.
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- 61) Bellotti et al.; “First results from the MACRO experiment at the Gran Sasso Laboratory”.
Nuclear Physics B (Proc. Supp) 19, 128 (1991)
- 62) Ahlen et al.; “Study of penetrating cosmic ray muons and search for large scale anisotropies at the Gran Sasso Laboratory”.
Physics Letters B 249, 149 (1990)
- 63) Bellotti et al.; “Simultaneous observation of extensive air showers and deep underground muons at the Gran Sasso Laboratory”.
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**i) Scintillating optical-fibre detectors
Pisa-CERN: 1988-1997**

- 64) C.Angelini et al.; “Decay time of light emission from cerium-doped scintillating glass”.
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- 65) C. Angelini et al.; “WA84 experiment: a beauty search with a scintillating-fibre microvertex detector”.
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- 66) C. Angelini et al.; “Sources of noise in high-resolution tracking with scintillating fibres”.
Nuclear Instruments and Methods in Physics Research A289, 356 (1990)

- 67) C. Angelini et al.; "Comparison of glass and plastic scintillating microfibres for high-resolution tracking".
Nuclear Instruments and Methods in Physics Research A295, 299 (1990)
- 68) M. Adinolfi et al.; "Application of a scintillating-fibre detector to the study of short-lived particles".
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- 69) M. Adinolfi et al.; "A high-resolution tracking detector based on capillaries filled with liquid scintillator".
Nuclear Instruments and Methods in Physics Research A311, 67 (1992)
- 70) M. Adinolfi et al.; "Progress on high-resolution tracking with scintillating fibres : a new detector based on capillaries filled with liquid scintillator".
Nuclear Instruments and Methods in Physics Research A315, 177 (1992)
- 71) M. Adinolfi et al.; "Use of a high-resolution, scintillating-fibre tracking detector in recording π^- nucleon interactions at $\sqrt{s} = 26$ GeV".
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- 72) Cardini et al.; "Comparison of plastic scintillating fibres and capillaries filled with liquid scintillator".
Nuclear Instruments and Methods in Physics Research, A346, 163 (1994)
- 73) A. Cardini et al., "Study of a capillary tracking detector with position-sensitive photomultiplier readout".
Nuclear Instruments and methods in Physics Research, A361, 129 (1995)
- 74) V. Agoritsas et al., "Scintillating Fibre hodoscopes using Position-Sensitive Photomultipliers".
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- 75) Autiero et al., "Study of a possible scintillating fibre tracker at the LHC and tests of scintillating fibres";
Nuclear Instruments and methods in Physics Research A336, 521 (1993)

- 76) Bosi et al.; “Tests of a scintillating-fibre detector based on position-sensitive photomultiplier readout”. Nuclear Instruments and Methods in Physics Research, A374, 48 (1996)
- 77) V. Agoritsas et al.; “Development of a scintillating-fibre detector for fast topological triggers in high-luminosity particle physics experiments”. Nuclear Instruments and Methods in Physics Research A411, 17 (1998)
- 78) V. Agoritsas et al.; “Read-out of scintillating fibres using a weak cross-talk”. Nuclear Instruments and Methods in Physics Research A406, 383 (1998)

**j) Charm and Beauty production in $\pi^- p$ scattering
Pisa-CERN: 1992-1999**

- 79) M.Adamovich et al.; “Search for the decay $D^0 \rightarrow \mu^+ \mu^-$ “. Physics Letters B353, 563 (1995)
- 80) M. Adamovich et al.; “WA92: a fixed target experiment to study beauty in hadronic interaction”. Nuclear Physics B (Proc. Suppl.) 27, 251 (1992)
- 81) M. Adamovich et al.; “A study of kinematical correlations between charmed particles produced in $\pi^- Cu$ interactions at $\sqrt{s} = 26$ GeV”. Phys. Lett., B385, 487 (1996)
- 82) Adamovich et. al.; “Trigger for the WA92 fixed-target beauty experiment”. Nuclear Physics B44, 435 (1995)
- 83) Adamovich et al.; “Study of charm correlations in $\pi^- N$ interactions at $\sqrt{s} = 26$ GeV “. Physics Letters B348, 256 (1995)
- 84) Adamovich et al.; “WA92: a fixed-target experiment to trigger on and identify Beauty Particle decays”. Nuclear Instruments and Methods in Physics Research, A 379, 252 (1996)

- 85) Adamovich et al.; "Measurements of charmed-meson production in interactions between 350 GeV/c π^- particles and nuclei".
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- 86) M. Adamovich et al.; "A measurement of the form-factor ratios in the decay $D^+ \rightarrow K^{*0} \mu^+ \nu$ ".
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- 87) M. Adamovich et al.; "Search for the flavour-changing neutral current decay $D^0 \rightarrow \mu^+ \mu^-$ ".
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- 88) Y. Alexandrov et al.; "Measurement of the kinematical variables of beauty particles produced in 350 GeV/c π^- Cu interactions".
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- 89) M. Adinolfi et al.; " $D^{*+/-}$ production in 350 GeV/c π^- N interactions".
Nuclear Physics B 547, 3 (1999)
- 90) Y. Alexandrov et al.; "Azimuthal correlations between beauty particles produced in 350 GeV/c π^- Cu interactions".
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- 91) M. Adamovich et al.; "Measurement of the beauty production cross section in 350 GeV/c π^- Cu interactions".
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- 92) Y. Alexandrov et al.; "Inclusive J/Ψ and Ψ' production in π^- nucleus interactions at $\sqrt{s} = 26$ GeV".
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- 93) Y. Alexandrov et al.; "Measurement of the $D_s \rightarrow \mu \nu_\mu$ branching fraction and of the D_s decay constant".
Physics Letters, B478, 31 (2000)

k) Search for Neutrino Oscillations
Pisa-CERN: 1993-2000

- 94) D. Autiero et al., “A high Stability Light Emitting Diode System for monitoring lead glass electromagnetic calorimeters”.
Nuclear Instruments and Methods in Physics Research, A372, 556 (1996)
- 95) D. Autiero et al., ”The electromagnetic calorimeter of the NOMAD experiment”.
Nuclear Instruments and Methods in Physics Research, A373, 358 (1996)
- 96) J. Altegoer et al.; “The NOMAD experiment at the CERN SPS”.
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- 97) J. Altegoer et al.; “Search for a new gauge boson in π^0 decay”.
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- 98) J. Altegoer et al.; “A search for $\nu_\mu \rightarrow \nu_\tau$ oscillations using the NOMAD detector”.
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- 99) P. Astier et al.; “ A more sensitive search for $\nu_\mu \rightarrow \nu_\tau$ oscillations in NOMAD”.
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- 100) D. Autiero et al.; “A study of transverse fluctuations of hadronic showers in the NOMAD electromagnetic calorimeter”.
Nuclear Instruments and Methods in Physics Research A411, 285(1998)
- 101) D. Autiero et al.; “Parameterisation of e and γ initiated showers in the NOMAD lead-glass calorimeter”.
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- 102) J. Altegoer et al.; “Precision measurement of scaled momentum, charge multiplicity and thrust in neutrino-nucleon and antineutrino-nucleon interactions”.
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- 103) P. Astier et al.; “Limit on $\nu_e \rightarrow \nu_\tau$ oscillations from the NOMAD

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- 104) P. Astier et al.; “Search for eV (pseudo)scalar penetrating particles in the SPS neutrino beam”.
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- 105) P. Astier et al.; “Measurement of the Λ polarization in ν_μ Charged Current Interactions in the NOMAD experiment”.
Nuclear Physics B588, 3 (2000)
- 106) P. Astier et al.; “Neutrino production of opposite sign dimuons in the NOMAD experiment”.
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- 107) P. Astier et al.; “Updated results from the ν_τ appearance search in NOMAD”.
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I) ATLAS experiment at the LHC Pisa-CERN: 1990-on

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- 109) S. Agnvall et al.; “Evaluation of the FERMI read-out of the ATLAS TileCal prototype”.
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- 110) Z. Ajaltouni et al.; “Response of the Atlas Tile Calorimeter Prototype to muons”.
Nuclear Instruments and Methods in Physics Research (1997)
- 111) Berger et al.; “A measurement of the energy-loss spectrum of 150 GeV muons in iron”.
Zeit. f. Physik C 73, 455 (1997)
- 112) Z. Ajaltouni et al.; “Results from a combined test of an electromagnetic liquid argon calorimeter with a hadronic scintillating-tile calorimeter”.
Nuclear Instruments and Methods in Physics Research A387, 333 (1997)

113) P. Amaral et al.; “Hadronic shower development in iron-scintillator tile calorimetry”.

Nuclear Instruments and Methods in Physics Research, A443, 51 (2000)

114) S. Akhmadaliev et al.; “Results from a new combined test of an electromagnetic liquid argon calorimeter with a hadronic scintillating tile calorimeter”.

Nuclear Instruments and Methods in Physics Research, A449, 461 (2000)