

## R J Ellis: Publications and Seminars

### Publications:

1. R J Ellis, H Sherman; *Track finding in wire spark chamber data*, Proceedings of the Computational Physics Conference, Culham, UK (1969).
2. H. Sherman, R J Ellis; *Least squares fitting of wire spark chamber events*. Proceedings of the Computational Physics Conference, Culham, UK (1969).
3. R J Ellis, Thesis: *A study of sigma hyperon decay*. Oxford University (1970). Also issued as a Rutherford Laboratory Preprint HEP/T/8.
4. R J Ellis, I M Blair, A E Taylor, A Astbury, D Axen, P I P Kalmus, H J Sherman, D T Williams, W R Gibson, I Bloodworth, M Gouanère, S L Meyer and V Efremenko; *Measurement of the electron asymmetry parameter in the decay of polarised sigma minus hyperons*. Nucl. Phys. B39 (1972), 77.
5. L G Ratner, R J Ellis, G Vannini, B A Babcock, A D Krisch and J R Roberts; *Inelastic proton-proton scattering at very high energy*. Phys. Rev. Letts. 27 (1971), 68.
6. L G Ratner, R J Ellis, G Vannini, B A Babcock, A D Krisch and J R Roberts; *Inelastic proton-proton scattering at very high energy*. Proceedings of the APS, Div. of Particles and Fields, Rochester, (1971).
- 7.<sup>1</sup> A Bertin, P Capiluppi, A Christallini, M D'Agostino-Bruno, R J Ellis, G Giacomelli, C Maroni, F Mercatali, A M Rossi and G Vannini; *Negative particle production at the CERN intersecting storage rings (ISR)*. Phys. Letts. 38B (1972), 260.
8. A Bertin, P Capiluppi, A Christallini, M D'Agostino-Bruno, R J Ellis, G Giacomelli, C Maroni, F Mercatali, A M Rossi and G Vannini; *Upper limits for heavy particle production at the CERN-ISR*. CERN-NP-Internal Note, (Feb 1972).
9. A Bertin, P Capiluppi, M D'Agostino-Bruno, R J Ellis, G Giacomelli, A M Rossi, G Vannini, A Bussière and R J Poe; *Charged particle production ratios at the CERN ISR for transverse momentum of 0.4 GeV/c*, Phys. Letts. 41B (1972), 201.
10. A Bertin et al; *Particle production at the CERN ISR for transverse momentum of 0.4 GeV/c*. Proceedings of the 16th Int. Conf. on High Energy Physics, Batavia, Illinois, September 1972.
11. A Bertin, et al: *Charged particle production at the CERN ISR as a function of transverse momentum*. Phys. Letts. 42B (1972), 493.
12. L G Ratner, R J Ellis, G Vannini, B A Babcock, A D Krisch and J R Roberts; *Measurement of p-p inclusive cross-sections at very high energy*. Argonne preprint UM HE 73-7. Phys. Rev. D9 (1974), 1135.
13. L Baksay, A Bohm, M Bozzo, R J Ellis, H Foeth, R Hammastrom, A Kernan, B Naroska, A Staude, P Strolin and C Rubbia: *A proportional chamber with two-dimensional read-out using drift time and current division*. Proc. of the Int. Conf. on Instrumentation for High Energy Physics, Frascati, Italy, May 1973.
14. A Bohm, M Bozzo, R J Ellis, M I Ferrero, H Foeth, G Goldhaber, M Hansroul, A Kernan, G Maderni, B Naroska, P Palazzi, C Rubbia, G Sette, A Staude, P Strolin and G de Zorzi: *Proton diffraction dissociation studies at the CERN ISR*. Nuc. Phys. B79 (1974), 1-9.
15. A Bohm, M Bozzo, R J Ellis, H Foeth, M I Ferrero, G Maderni, B Naroska, C Rubbia, G Sette, A Staude, P Strolin and G de Zorzi: *Observation of a diffraction minimum in proton-proton elastic scattering at the ISR*. Phys. Letts. 49B (1974), 491.
16. P Capiluppi, G Giacomelli, A M Rossi, G Vannini, A Bertin, A Bussière and R J Ellis: *Charged particle production in proton-proton inclusive reactions at very high energies*. Nuc. Phys. B79 (1974), 189-258.

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<sup>1</sup> This paper had the sixth highest citation rate of all the half million papers published in all fields of science in 1972. Current Contents, p7, (1973).

17. L Baksay, A Bohm, H Foeth, A Staude, W Lockman, M Meddinis, T Meyer, J Rander, P Schlein, R Webb, R J Ellis, B Naroska and P Strolin: *Measurements of  $p+p \rightarrow (p \pi^+ \pi^-)+X$  at the CERN ISR. Scaling test and evidence for double excitation.* Proc. of the 17th Int. Conf. on High Energy Physics, London, July 1974.
18. L Baksay, A Bohm, H Foeth, A Staude, W Lockman, M Meddinis, T Meyer, J Rander, P Schlein, T Trippe, R Webb, R J Ellis, B Naroska and P Strolin: *Observation of diffractive excitation in  $p+p \rightarrow (p \pi^+ \pi^-)+X$  at the CERN ISR and tests of limiting fragmentation.* Phys. Letts. 53B (1975), 484.
19. R Webb et al: *Production of nucleon resonances by single diffraction dissociation at the CERN ISR.* Phys. Letts. 55B (1975), 331.
20. L Baksay et al: *Evidence for double diffraction excitation in  $p+p \rightarrow (p \pi^+ \pi^-)+X$  at the CERN ISR and test of factorization.* Phys. Letts. 55B (1975), 491.
21. R Webb et al: *Double diffraction dissociation and test of pomeron factorization at the CERN ISR.* Phys. Letts. 55B (1975), 336.
22. W Lockman et al: *Tests of scaling in inclusive  $\Delta^{++}(1236)$  production with  $\sqrt{s}=23$  and 35 GeV at the CERN ISR.* Proc. of the Int. Conf. on High Energy Physics, Palermo, Italy, April 1975.
23. W Lockman et al: *Invariant cross-sections of the inclusive  $\Lambda^{\circ}$  production with  $\sqrt{s}=35$  and 62 GeV at the CERN ISR: Tests of scaling.* Proc. of the Int. Conf. on High Energy Physics, Palermo, Italy, April 1975.
24. J Rander et al: *An inclusive measurement of  $\Lambda^{\circ}$  production at the CERN ISR for  $\sqrt{s}=53$  and 62 GeV.* Proc. of the Washington meeting of the APS, April 1975. Phys. Rev. Analytic Subject Index: 63.6.
25. R Webb et al: *Observation of diffraction excitation in  $p+p \rightarrow (p \pi^+ \pi^-)+X$  at the CERN ISR and tests of limiting fragmentation.* Proc. of the Washington meeting of the APS, April 1975. Phys. Rev. Analytic Subject Index: 63.6.
26. T Meyer et al: *Evidence for double diffraction excitation in  $p+p \rightarrow (p \pi^+ \pi^-)+X$  at the CERN ISR and test of factorization.* Proc. of the Washington meeting of the APS, April 1975.
27. W Lockman et al: *Measurement of inclusive  $\Delta^{++}(1236)$  production at small momentum transfers for  $\sqrt{s}=23$  and 35 GeV in proton-proton collisions.* Proc. of the Washington meeting of the APS, April 1975.
28. L Baksay et al: *Diffraction dissociation in the reaction  $p+p \rightarrow \Lambda^{\circ}+K^++p$  at the CERN ISR.* Phys. Letts. 61B (1976), 405.
29. L Baksay et al: *Multiwire proportional chamber spectrometer for the CERN intersecting storage rings.* Nuc. Instr. and Meth. 133 (1976), 219.
30. W Lockman et al: *Tests of scaling and one-pion-exchange in inclusive  $\Delta^{++}(1236)$  production at the CERN ISR.* UCLA-1103 and Proc. of the XVIII Int. Conf. on High Energy Physics, Tbilisi, USSR 1976.
31. R Webb et al: *Proton diffraction dissociation in the reaction  $p+p \rightarrow \Lambda^{\circ}+K^++p$  at the CERN ISR.* CERN-NP-Internal Report, August 1975.
32. S Erhan, W Lockman, M Meddinis, J Rander, P Schlein, R Webb, A Bohm, H Foeth, A Staude, R J Ellis, B Naroska, P Strolin and J Zsembery.  *$\Lambda^{\circ}$  polarisation in proton-proton interactions at  $\sqrt{s}=53$  and 62 GeV.* UCLA-1122 and Phys. Letts. 82B (1979), 301.
33. R J Ellis, H J Ziock, K O H Ziock, J Bolger, E Boschitz, J Piffaretti, R Corfu and J Arvieux: *Isospin effects in the reactions  $^{12}C(\pi^{\pm}, \pi^{\pm}p)^{11}B$  and  $^{12}C(\pi^{\pm}, \pi^{\pm}d)^{10}B$ .* Proc. of the 2nd Int. Conf. on Meson-Nuclear Physics, March, 1979.
34. R J Ellis, H J Ziock, K O H Ziock, J Bolger, E Boschitz, J Arvieux, R Corfu and J Piffaretti: *Coincidence measurements of the reactions  $^{12}C(\pi^{\pm}, \pi^{\pm}d)^{10}B$  and  $^{12}C(\pi^{\pm}, \pi^{\pm}t)^9B$ .* Phys. Letts. 88B (1979), 253.
35. H J Ziock, R J Ellis, K O H Ziock, J Bolger, E Boschitz, J Arvieux, R Corfu and J

- Piffaretti: *Measurement of the ratio  $\sigma(^{12}\text{C}(\pi^+, \pi^+p)^{11}\text{B})/\sigma(^{12}\text{C}(\pi^-, \pi^-p)^{11}\text{B})$* . Phys. Rev. Letts. 43 (1979), 1919.
36. R J Ellis, H J Ziock, K O H Ziock, J Bolger, E Boschitz, J Arvieux, R Corfu and J Piffaretti: *Coincidence measurements of the reactions  $^{12}\text{C}(\pi^\pm, \pi^\pm d)^{10}\text{B}$  and  $^{12}\text{C}(\pi^\pm, \pi^\pm t)^9\text{B}$* . Proc. of the Workshop on nuclear structure with intermediate-energy probes, Los Alamos, NM, January 1980.
  37. H J Ziock, R J Ellis, K O H Ziock, J Arvieux, J Bolger, E Boschitz, R Corfu and J Piffaretti: *The charge dependence of the knock-out reactions  $^{12}\text{C}(\pi^\pm, \pi^\pm p)^{11}\text{B}$ ,  $(^{12}\text{C}(\pi^\pm, \pi^\pm d)^{10}\text{B})$  and  $(^{12}\text{C}(\pi^\pm, \pi^\pm t)^9\text{B})$* . Proc. of Int. Conf. on Nuclear Physics, Berkeley, 1980.
  38. H J Ziock, R J Ellis, K O H Ziock, H J Weber, J Arvieux, J Bolger, E Boschitz, R Corfu and J Piffaretti: *Angular distribution for the reaction  $^{12}\text{C}(\pi^+, \pi^+p)^{11}\text{B}$* . Proc. of Int. Conf. on Nuclear Physics, Berkeley, 1980.
  39. H J Ziock, R J Ellis, K O H Ziock, H J Weber, J Arvieux, J Bolger, E Boschitz, R Corfu and J Piffaretti: *Momentum distribution for the reaction  $^{12}\text{C}(\pi^+, \pi^+p)^{11}\text{B}$* . Proc. of Int. Conf. on Nuclear Physics, Berkeley, 1980.
  40. R J Ellis, H J Ziock, K O H Ziock, J Arvieux, J Bolger, E Boschitz, R Corfu and J Piffaretti: *Angular and momentum distributions for  $^{12}\text{C}(\pi^+, \pi^+d)^{10}\text{B}$* . Proc. of Int. Conf. on Nuclear Physics, Berkeley, 1980.
  41. R J Ellis, H J Weber, H J Ziock, E R Siciliano: *A shell model based mechanism for the reaction  $^{12}\text{C}(\pi^+, \pi^+d)^{10}\text{B}$* . Proc. of the Int. Conf. on Nuclear Physics, Berkeley, 1980.
  42. R J Ellis, H J Ziock, K O H Ziock, H J Weber, J Arvieux, J Bolger, E Boschitz, R Corfu and J Piffaretti: *Evidence for the production of a dibaryon resonance in  $^{12}\text{C}(\pi^+, \pi^+d)^{10}\text{B}$* . Proc. of Int. Conf. on Nuclear Physics, Berkeley, 1980.
  43. R J Ellis et al: *A neutron oscillation experiment at Los Alamos Meson Production Facility (LAMPF)*. Lampf Proposal #647, January 1981, 40pp.
  44. R J Ellis et al: *Evidence against clusters in  $^{12}\text{C}$  nuclei and against the  $^1D_2$  2140 dibaryon resonance*. Proc. of the Lampf Workshop on nuclear structure with intermediate energy probes, Los Alamos National Laboratory Report, LA-8303-C, 1981.
  45. H J Ziock et al: *Quasifree scattering of positive pions on carbon*. Phys. Rev. C, 24 (1981), 2674.
  46. R J Ellis et al: *A neutron oscillation experiment at LAMPF II*. LAMPF Proposal #647, completely revised, June 1981, 120pp.
  47. R J Ellis et al: *Reactions  $^{12}\text{C}(\pi^\pm, \pi^\pm d)^{10}\text{B}$  and  $^{12}\text{C}(\pi^\pm, \pi^\pm t)^9\text{B}$* . Phys. Rev. C, 26 (1982), 1544.
  48. R J Ellis: *Neutron oscillations and proton-decay experiments*. CERN preprint EP/83-26, 1983.
  49. R J Ellis: *A study of  $^{163}\text{Ho}$  neutrino mass experiments*. CERN EP-Internal Report, May 1983.
  50. R J Ellis: *Non-equilibrium thermodynamics and degenerate disease*. Medical Hypotheses 14(1): 83-98, 1984.

### Invited Seminars and Colloquia

1. *Track finding in wire spark chamber data.* The Computational Physics Conference, Culham, UK, 1969.
2. *A measurement of the asymmetry parameter in sigma minus beta decay.* Bologna University, Italy, 1970.
3. *Scaling in hadron interactions at the CERN ISR.* Given at:
  - a. Rutherford Laboratory, Chilton, UK, 1972.
  - b. Daresbury Laboratory, Daresbury, UK, 1972.
4. *Two particle correlations at the ISR.* CERN, Switzerland, 1973.
5. *Recent results from a multi-particle spectrometer on the CERN ISR.* SLAC, Stanford, CA. 1974.
6. *Pion-induced knock-out reactions on  $^{12}\text{C}$ .* Given at:
  - a. University of Oklahoma, USA, 1980.
  - b. LAMPF, Los Alamos, NM, USA, 1980.
  - c. University of New Mexico, Albuquerque, NM, USA, 1980.
  - d. Brookhaven National Laboratory, LI, USA, 1980.
7. *Evidence for the production of a dibaryon resonance in  $^{12}\text{C}(\pi^+, \pi^+d)^{10}\text{B}$ .* The International Conference on Nuclear Physics, Berkeley, 1980.
8. *A Neutron oscillation experiment at LAMPF.* Given at:
  - a. The LAMPF Program Advisory Committee, Los Alamos, Jan and July, 1981.
  - b. The University of Arizona, Tucson, AZ, January 1981.
  - c. The College of William and Mary, Williamsburg, VA, Jan. 1981.
  - d. Istituto di Fisica, Universita di Pavia, Pavia, Italy, Dec. 1981.
  - e. CERN, Geneva, Switzerland, December 1981.
  - f. Department of Energy, Washington DC, April 1983.
  - g. Istituto di Fisica, Universita di Pavia, Pavia, Italy, May, 1983.
9. *Non-equilibrium thermodynamics and degenerate disease.* CERN Colloquium, May 1983.