

Bibliography

Antiproton and pion yield, targetry and antiproton collection - by date.

D. Dekkers, et Al., Experimental Study of Particle Production at Small Angles in Nucleon-Nucleon Collisions at 19 and 23 GeV/c, *Phys Rev*, 137, 4B, pp. 962-978 (1965).

G. Belletini, et Al., Proton-Nuclei Cross Sections at 20 GeV, *Nucl. Phys* 79, pp. 609-624, (1966).

L.G. Ratner et Al., Pion, Kaon and Antiproton Production in the Center-of-Mass in High-Energy Proton-Proton collisions, *Phys. Rev.* 166, 5, pp. 1353-1364, (1968).

J.V. Allaby et Al., High-Energy Particle Spectra from Proton Interactions at 19.2 GeV/c, CERN 70-12, (1970).

T. Eichten, et Al., Particle Production in Proton Interactions in Nuclei at 24 GeV/c, *Nucl. Phys.* B44, pp. 333-343, (1972).

U. Amaldi et Al., Comparison of Momentum Spectra of Secondary Particles Produced in Proton-Proton collisions at 14.2, 19.2 and 24 GeV/c, *Nucl. Phys* B86 pp. 403-440, (1975).

C. Bromberg et Al., Inclusive and Semi-Inclusive Pion production in p-p Collisions at 102 GeV/c and 400 GeV/c, UR-563, UMBC-76-2, (also *Nucl. Phys.* B), (1976).

J.R. Johnson et Al., Inclusive Production of Pions, Kaons, Protons and Antiprotons in High Energy p-p Collisions, Fermilab-Pub-77/99-EXP, 7100.284, (also *Phys. Rev. Lett.*), (1977).

A.A. Borisov, et Al., Relative yields of secondaries in 70 GeV/c Proton Interactions with Nuclear Targets, Preprint IHEP 78-115, Serpukhov, (submitted to *Yad. Fiz.*), (1978).

D. Cline, Antiproton Production Characteristics and Collector Systems, *Proc. Workshop on Producing High Luminosity High Energy Proton Antiproton Collisions*, LBL-7574 pp. 106-111, (1978).

D. Cline, The Development of Bright Antiproton Sources and High Density Targeting, *Proc. 11th Int. Conf. High Energy Accelerators*, Geneva 1980, pp. 354-361

T.A. Vsevolozskaya, The Optimisation and Efficiency of Antiproton Production within a Fixed Acceptance, INP, Novosibirsk, Preprint 80-222, (1980).

A.E. Brenner et Al., Experimental Study of Single Particle inclusive Hadron scattering and Associated Multiplicities, Fermilab-Pub-81/82-EXP 7160.118 (also *Phys Rev. D*) (1981).

L.M. Barkov et Al., Low energy Hadron production at Zero angle in Proton-Nucleus Collisions at 70 GeV, IHEP-INP preprint 81-107, (1981)

R. Beckmann, Electron Yield from p-N Collisions, (A study with KASPRO-EGS program), CERN/PS/MU/EP/Note 82-13, (1982).

S. Conetti, A.G. Ruggiero, Production of Electrons and Positrons by Impinging 100 GeV Protons on a Target for the Purpose of Filling an Electron Storage ring, Fermilab-FN-364, 1502.000, (1982).

L.M. Barkov et Al., Hadron Production Below 2 GeV/c in Proton-Nucleus Collisions at 70 GeV, INP Novosibirsk, Preprint 82-42, (1982).

J.F. Amann et Al. (Los Alamos) Measurement of Production Cross Sections for Negative Pions, Kaons and Protons at 10, 18, 24 GeV, LA-9486-MS UC-34c, (1982)

S.P. Denisov, S.V. Donskov, Yu.P. Gorin, R.N. Krasnokutsky, A.I. Petrukhin, Yu.D. Prokoshkin and D.A. Stoyanova, Absorption Cross Sections for Pions, Kaons, Protons and Antiprotons on Complex Nuclei in the 6 to 60 GeV/c Momentum Range, *Nucl. Phys.* B61, pp. 62-76, (1973).

P. Sievers, Elastic Stress Waves in Matter Due to Rapid Heating by an Intense High-Energy Particle Beam, CERN/LAB.II/BT/74-2, (1974)

D. Cline, Antiproton Production Characteristics and Collector Systems, *Proc. Workshop on Producing High-Luminosity High Energy Proton Antiproton Collisions*, LBL-7574, p. 106 (1978).

P. Sievers, Some Remarks Concerning the Antiproton Production Target, CERN/SPS/ABT/Tech.Note/78-11, (1978).

Design Study of a Proton-Antiproton Colliding Beam Facility, CERN/PS/AA 78-3, (1978).

D. Cline, The Development of Bright Antiproton Sources and High Density Targeting, *Proc. 11th. Int. Conf. on High Energy Accelerators*, Geneva, p. 345 (1980).

H. Ullmaier and W. Schilling, Radiation Damage in Metallic Reactor Materials, (IEAEA-SMR-46/105), *Physics of Modern Materials*, Vol. 1 p. 301, IEAEA, Vienna, 1980.

C. Hojvat and A. van Ginneken, Calculation of Antiproton Yields For the Fermilab Antiproton Source. *Nucl. Instr. and Meth.* 206, pp. 67-83, (1983).

E. Jones, Antiproton Production and Collection, CAS lectures, CERN/PS-AA/83-46, (1983).

A.H. Sullivan, Estimation of the Induced Activity Levels to be Expected in the Lithium Lens to be Used in AA, CERN/TIS-RP/IR/83-09, (1983).

G. Dugan, C. Hojvat, A.J. Lennox, G. Biallis, F. Cilyo, M. Leininger, J. McCarthy, W. Sax, S. Snowdon, Mechanical and Electrical Design of the Fermilab Lithium Lens and Transformer System, *IEEE Trans Nucl. Sci.*, Vol. NS-30, No. 4, pp. 3660-3662 (1983)

B.F. Bayanov, T.A. Vsevolozhskaya, Yu.N. Petrov, G.I. Silvestrov, Large-Diameter Cylindrical Lenses with Liquid Lithium, (preprint) *IX All-Union Conf. On High Energy Accelerators, Dubna*, (1984).

A.J. Lennox, The Design Parameters for a Lithium Lens as Antiproton Collector, *IEEE Trans Nucl. Sci.*, Vol. NS-30, No. 4, pp. 3663-3665 (1983).

J-C. Schnuriger, Adaptation de la Cible de Productions d'Antiprotons, CERN/PS/AA/ACOL/Note 84-6, (1984).

A. Poncet, ACOL Pulsed Target - Some Calculations with the DOT Heat Transfer Program. CERN/PS/AA/ACOL Note 84-13, (1984).

T.W. Eaton, A. Poncet, Hydrodynamic Calculations on Solid and Liquid Targets, CERN/PS/AA/Note 84-9

Y.W. Yang, J. Guildys and S.H. Fistedis, Two-Dimensional Hydrodynamic Analysis for Primary Containment, Argonne National Laboratory.

T.W. Eaton, A. Poncet, Hydrodynamic Calculations on Solid and Liquid Targets, CERN/PS/AA/Note 84-9, (1984).

J-C. Schnuriger, Proposal for a Reliable Solution for the Improved Production of Antiprotons for ACOL, CERN/PS/AA/AC-21, (1984).

A.H. Sullivan, Shielding for ACOL, CERN/TIS-RP/IR/84-54 and CERN/PS/AA/ACOL/ Note 84-23 (1984).

J. V. Allaby, Antiproton production, CERN/EP/Note 15/02/84, (1984).

Autopsie d'Une Cible en Cuivre
CERN Central Workshop Metallurgy Dept. Report No. 3103 (1984)

Etude d'Une Cible a Antiprotons en Plomb
CERN Central Workshop Metallurgy Dept. Report No. 3198 (1984)

R. Horne, Preliminary Post-Irradiation Examination of a Rhenium "Snout" Target
CERN Remote Handling Section (unpublished - copy with C. Johnson) (1985)

Metallographic Examination of a Lightly Irradiated Copper/Graphite/Aluminium
Target for CERN.Federal Institute for Reactor Research, Wuerenlingen, Switzerland.
Report No. EIR KT: 7.423.0284 (1984)

T.W. Eaton, T. Jenkins, Radiation Damage in Antiproton Targets,
CERN/PS/AA/Note 85-4, (1985).

T. Jenkins and T. Eaton, Adiabatic Beam Heating in the Pre-stressed Antiproton
Production Target, CERN/TIS-RP/IR/85-14, (1985).

T.W. Eaton, S. Hancock, C.D. Johnson, E. Jones, S. Maury, S. Milner, J-C. Schnuriger
and T.R. Sherwood, Conducting Targets for Antiproton Production of ACOL - Past
Experience and Prospects, *Proc. 1985 Particle Accelerator Conference, IEEE Trans. Nucl.
Sci.* NS-32 Vol. 5, p.3060, (1985).

T.W. Eaton, A Comparison Between the Observed Decreases in Antiproton Yield
from Passive Targets and the Theoretical Predictions Based on the Concept of Stress
and Temperature Enhanced Void Growth, CERN/PS/AA/Note 85-9, (1985).

T.W. Eaton, F. Gamba, M. Möller, G.R. Stevenson, Calculations of Beam Energy
Deposition, Adiabatic Heating and Thermal Stress in Windows of High Density
Passive Targets, CERN/PS/AA/Note 85-14, (1985).

D. Adam, T.W. Eaton, O.C. Jonsson, J.W. Petersen, H. Ravn, Solubility Studies on
Liquid and Solid Metals, CERN/EP/TWE/tdn, (1986).

T.W. Eaton, S. Hancock, C.D. Johnson, E. Jones, S. Maury, S. Milner, J-C. Scnuriger, T.R. Sherwood, Conducting Targets for Antiproton Production of ACOL, Past Experience and Prospects. CERN/PS/85-18 (AA) and *Proc. 1985 Particle Accelerator Conference*, Vancouver, Canada, (1985).

D.C. Fiander, C.D. Johnson, S. Maury, T.R. Sherwood, Beam Tests of a 2 cm Diameter Lithium Lens, CERN/PS/85-29 (AA) and *Proc. 1985 Particle Accelerator Conference*, Vancouver, Canada, (1985).

T.W. Eaton, C.D. Johnson, E. Jones, Recent Work on the Production of Antiprotons from Pulsed-Current Targets, CERN/PS/86-15 (AA), (1986), (revised and reprinted 1994).

T.W. Eaton, The Significance of the Specific Acoustic Impedance of Materials in Determining the Magnitude of the Major Shock Wave Effects in Antiproton Targets, CERN/PS/AA/Note 85-1, (1985).

Feasibility Study into the Development of a Liquid Metal Pulsed Current Target for ACOL Cambridge Consultants Ltd., Cambridge, U.K.
Report No. C2365/F (1985) Contract No: R/785.985/PS/AA

T.W. Eaton, C. Carter, The Practical Difficulties Inherent in the Design of a Reliable Active Solid Antiproton Target for ACOL, CERN/PS/Note 85-11, (1985)

A.H. Sullivan, The Release of Radioactivity from Rhenium Targets in AA. CERN/TIS-RP/TM/85-40, (1985)

T.A. Vsevolozhskaya, G.I. Silvestrov, Conic Lithium Lenses, Preprint, Novosibirsk (1985).

P. Sievers, Development of Lithium Lenses at CERN, *Proc. Part. Accel. Conf.*, Vancouver, Canada, pp. 3066-3068, (1985).

A. Ijspeert, P. Sievers, Computations of Transient Magnetic Fields, Current Densities and Temperature Rises in the CERN Lithium Lens, *Proc. Int. Conf. On High Energy Accel.*, Novosibirsk, USSR, (1986).

E. Jones, ACOL, CERN,s Upgrade of the Antiproton Accelerator Complex, *Proc. 6th Int. Conf. On p-pbar Physics*, Aachen, 1986, also CERN/PS/86-30 (1986).

T.W. Eaton, An Estimate of the Loss in Antiproton Yield Caused By Decreases in Target Density Over Times Equal to the Duration of the Proton Pulse. CERN/PS/AA/Note 86-3 (1986)

G. Dugan, Comparisons of Antiproton Yield Calculations with data, Fermilab pbar Note No. 448, (1986)

G. Dugan, Antiproton Yield Calculations, Fermilab pbar Note No. 449, (1986)

T.W. Eaton and the AA Group, Some Metallurgical Aspects of Antiproton Targets, CERN/PS/AA/Note 86-12, (1986).

T.W. Eaton, F. Gamba, M. Ross, A Closed Circuit Air Cooling System for the New design of Passive Targets for ACOL, CERN/PS/AA/Note 86-5, (1986).

T.W. Eaton, Cavitation, Catastrophe or Illusion in High Density Passive Targets, CERN/PS/AA/ACOL Note 148, (1986).

A. Ijspeert, T. Eaton, M. Ross, P. Sievers, Assessment of the Further Development of Pulsed Targets for ACOL, CERN/SPS/ABT/Tech. Note 86-3, (1986).

R. Bellone, A. Ijspeert, P. Sievers, Targets for High Intensity Beams at CERN- Design, Operational Experience and development, CERN/SPS/ST/TE/A/113, (1986).

A. Ijspeert, Is a Solid Conducting Target for ACOL more than a Mirage ? - A picture of the technical limits by means of some simple temperature and stress calculations, CERN/SPS/ABT/Tech. Note 86-13, (1986)

R. Bellone, A. Ijspeert, P. Sievers, The Results of Prototype Tests and Temperature and Field Computations of the CERN Lithium Lens, CERN/SPS/ST/TE/A/114, (1986).

A. Ijspeert, P. Sievers, Computation of the Transient Magnetic Fields, Current Densities and Temperature Rises in the CERN Lithium Lens, CERN/SPS/ABT/86-18, and *13th Int. Conf on High Energy Accelerators, Novosibirsk*, (1986).

P. Coventry, T.W. Eaton, Energy Deposition Calculations in Lithium Lens Assemblies used with a High Density Passive Target, CERN/PS/BT/Note 6-1, (1986).

High Temperature Compatibility Between Materials for Pulsed Current Targets, Osterreichisches Forschungszentrum, Seibersdorf, Austria.

Report No. OEFZS-A-0852 WE-402/86 (1986)

A. Ijspeert, Development of an Aluminium Lens, CERN/SPS/ABT/87-34 (1987).

T.W. Eaton, Oxidation and Thermal Cycling Effects in Titanium Alloy (IMI318), Technical Report Sheffield Polytechnic, October 1987.

A.H. Sullivan, Radiation Safety Aspects of the ACOL Antiproton Facility, CERN/TIS-RP/199, (1987).

A.H. Sullivan, Induced Radiation Levels Expected in the ACOL Target Area, CERN/TIS-RP/TM/87-23, (1987).

P. Sievers, Some Comments Concerning Development of Second Generation Lithium Lenses, CERN/ST/TE/A/87-153/mc, (1983).

C.D. Johnson, E.Jones, T.R. Sherwood, Antiproton Yield Expectations for the ACOL Project, CERN/PS/87-19 (AA) and *Proc 1987 US Particle Accelerator Conference*, Washington, (1987)

N.J. Walker, Theoretical Antiproton Yields for the AAC, CERN/PS/88.69(AR), (1988).

C.D. Johnson, Present and Future Possibilities of Antiproton Production from Fixed Targets at CERN, *Hyperfine Interactions*.44, pp 21-30, (1988).

S. Maury, C. Metzger, F. Pedersen, T.S. Sherwood, Beam Tests of a 36 mm Lithium Lens, CERN/PS/AR/ME/Note 86, (1989).

G. Adrien, V. Chohan, Operational Performance of Different Collector Lenses after the Target of the AAC Complex, CERN/PS/OP Note 93-59 (1993).