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CERN/PS 95-01 (DI)
Edited by S.L. Neboux

CERN/PS 95-02 (PA)
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R. Cappi
Workshop on Collective Effects in Large Hadron Colliders, 7-22 October 1994, Montreux , Switzerland,

CERN/PS 95-03 (CO)
Integrating Commercial Software in Accelerator Control Case Study
A. Pace
CTDCA (International Conference on Current Trends on Data Acquisition and Accelerator Control) - 5-9 December 1994, Calcutta, India.

CERN/PS 95-04 (OP)
Emittance Measurements with the CERN PS Wire Scanner
Ch. Steinbach
International Workshop on Particle Dynamics in Accelerators, "Emittance in Circular Accelerators", 21-26.11.1994, Tsukuba, Japan

CERN/PS 95-05 (PA)
Emittance Issues in the CERN-PS
R. Cappi
International Workshop on Particle Dynamics in Accelerators, "Emittance in Circular Accelerators", 21-26.11.1994, Tsukuba, Japan

CERN/PS 95-06 (BD/OP)
The Fast Wire Scanner of the CERN PS
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D. Möhl
Workshop on Collective Effects in Large Hadron Colliders, 7-22 October 1994, Montreux, Switzerland

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Resonator Method for Impedance Determination
F. Caspers and T. Scholz
Workshop on Collective Effects in Large Hadron Colliders, 7-22 October 1994, Montreux, Switzerland

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1995 Particle Accelerator Conference, Dallas, USA, 30.4.-5.5.95

CERN/PS 95-12 (LP), CLIC Note 276
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1995 Particle Accelerator Conference, Dallas, USA, 30.4.-5.5.95

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1995 Particle Accelerator Conference, Dallas, USA, 1-5 May, 1995

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CERN/PS 95-16 (AR)
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J. Bosser, S. Maury, I. Meshkov, D. Möhl, E. Mustafin, E. Syresin, F. Varenne, P. Zenkevich
1995 Particle Accelerator Conference Dallas, USA, 30.4.-5.5.95

CERN/PS 95-17 (AR)
Neutralisation of the LEAR Electron-Cooling Beam: Experimental Results
1995 Particle Accelerator Conference, Dallas, USA, 30.4.-5.5.95

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R. Cappi, L. Durieu, J.-Y. Hémery, M. Martini, J.P. Riunaud, Ch. Steinbach
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B. Autin, R. Corsini
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T.R. Sherwood
12th International Conference on Laser Interaction and Related Plasma Phenomena, Osaka, Japan, April 24-28, 1995

CERN/PS 95-21 (PA)
Automatic Beam Steering in the CERN PS Complex
B. Autin, G.H. Hemelsoet, M. Martini, E. Wildner
1995 Particle Accelerator Conference, Dallas, USA, 30.4.-5.5.95

CERN/PS 95-22 (PA)
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M. Arruat, B. Autin, G.H. Hemelsoet, M. Martini, E. Wildner
4th International Workshop on Software Engineering and Artificial Intelligence for High Energy and Nuclear Physics, Pisa, Italy, 3-8.4. 95

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H. Schönauer
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H. Haseroth
1995 Particle Accelerator Conference, Dallas, USA, 30.4.-5.5.95

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1995 Particle Accelerator Conference, Dallas, USA, 30.4.-5.5.95

CERN/PS 95-28 (BD)
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J. Bosser
Second European Workshop on Beam Diagnostics and Instrumentation for Particle Accelerators, Travemünde, Germany, 29-31 May 1995

CERN/PS 95-29 (OP)
Determination of Beam Parameters for LEAR with Neural Nets
M. Ludwig and G. Stimpfl-Abele
4th International Workshop on Software Engineering and Artificial Intelligence for High Energy Physics, Pisa, Italy, 3-8 April 1995

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A 3 Ghz Photoelectron gun for high beam intensity
R. Bossart, H. Braun, M. Dehler, J.-C. Godot
17th International Free Electron Laser Conference, August 21-25 1995, New York, USA

CERN/PS 95-34 (CO)
Representation and Usage of Knowledge for Initialization of Accelerator Control Equipment
J.-M. Bouché, G. Daems, V. Filimonov, V. Khomoutnikov, F. Perriollat, Y. Ryabov
"Real Time '95", IXth. Conf. on Real-Time Computer Applications in Nuclear, Particle, and Plasma Physics, May 23-26, East Lansing, MI, U.S.A.

CERN/PS 95-35 (AR)
Measurement of the Lifetime of Pb52+, Pb53+ and Pb54+ at 4.2 MeV per Nucleon Subject to Electron Cooling
Paper published in Physics Letters B

CERN/PS 95-36 (AR)
The Antiproton Decelerator (AD), A Simplified Antiproton Source (Feasibility Study)

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Model Based, Detailed Fault Analysis in the CERN PS Complex Equipment
M. Beharrell, G. Benincasa, J.-M. Bouché, J. Cuperus, M. Lelaizant, L. Mérard
ICALEPCS’95, Int. Conference on Accelerator and Large Experimental Physics Control Systems, Chicago (U.S.A.), Oct. 29-Nov. 3, 1995

CERN/PS 95-38 (CO)
Automatic Generation of Configuration Files for a Distributed Control System
J. Cuperus, A. Gagnaire
ICALEPCS’95, Int. Conf. on Accelerator and Large Experimental Physics Control Systems, Chicago (U.S.A.), Oct. 29-Nov. 3, 1995

CERN/PS 95-39 (CO)
Experience in the Exploitation of a Large Control System
G. Daems, F. Perriollat, C. Serre
ICALEPCS’95, Int. Conf. on Accelerator and Large Experimental Physics Control Systems, Chicago (U.S.A.), Oct. 29-Nov. 3, 1995

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ICALEPCS’95, Int. Conf. on Accelerator and Large Experimental Physics Control Systems, Chicago (U.S.A.), Oct. 29-Nov. 3, 1995
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A Rule-Based Consultant for Accelerator Beam Scheduling used in the CERN PS Compl
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ICALEPCS'95, Int. Conf. on Accelerator and Large Experimental Physics Control Systems, Chicago (U.S.A.), Oct. 29-Nov. 3, 1995

CERN/PS 95-42 (CO)
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N. de Metz-Noblat
ICALEPCS'95, Int. Conf. on Accelerator and Large Experimental Control Systems, Chicago (U.S.A.), Oct. 29-Nov. 3, 1995

CERN/PS 95-43 (RF/CO)
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N. de Metz-Noblat, F. di Maio, R. Garoby, M. Gouber-Pace, S. Hancock
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C.-H. Sicard, O. Walter
ICALEPCS'95, Int. Conf. on Accelerator and Large Experimental Control Systems, Chicago (U.S.A.), Oct. 29-Nov. 3, 1995

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F. di Maio, J. Meyer, A. Götz
ICALEPCS'95, Int. Conf. on Accelerator and Large Experimental Control Systems, Chicago (U.S.A.), Oct. 29-Nov. 3, 1995

CERN/PS 95-46 (HI)
A Single Pulse Beam Emittance Measurement for the CERN Heavy Ion Linac
M. Crescenti, U. Raich
2nd European Workshop on Beam Diagnostics and Instrumentation for Particle Accelerators, Travemünde, 28-31 May 1995

CERN/PS 95-47 (HI)
Laser Ion Source Studies at CERN
John Tambini
(reporting for the CERN laser ion source collaboration)
Fourth International Workshop on Iodine Lasers and their Applications, Trest Castle, Czech Republic, 19-22 September 1995

CERN/PS 95-48 (DI)
The Accelerator Complex for the AUSTRON Neutron Spallation Source and Light-ion Cancer Therapy Facility
The AUSTRON Accelerator Study Group supported by the Austrian government and hosted by CERN

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reported by H. Braun, J.P. Delahaye, I. Wilson
LCWS95 Workshop on Physics with Linear Colliders, Iwate, Japan, 8-12 9.95

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Pulsed ECR Source in Afterglow Operation at CERN
C.E. Hill, K. Langbein
6th International Conference on Ion Sources (ICIS'95) Whistler, BC, Canada, 10-16.09.95

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Multi-Charged Ion Sources for Pulsed Accelerators
H. Haseroth, C.E. Hill
6th International Conference on Ion Sources (ICIS'95) Whistler, BC, Canada, 10-16.09.95

CERN/PS 95-52 (HI)
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H. Haseroth, C.E. Hill, K. Langbein, G.D. Shirkov

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