

PACKAGE ID - 001022SUN0000 ZLIB

KWIC TITLE - The Numerical Library for Differential Algebra

AUTHORS - Yan, Y.T.
Superconducting Super Collider Laboratory, Waxahacie,
TX, (United States)

LIMITATION CODE -UNL **AUDIENCE CODE** - UNL

COMPLETION DATE - 03/01/1994 **PUBLICATION DATE** - 03/01/1994

DESCRIPTION - Nonlinear single-particle dynamics in storage rings.
Extraction and analysis of one-turn map for storage rings.

PACKAGE CONTENTS - Media Directory; Software Abstract; README.File (2
pages); Media Includes Source Code, Sample Problem Input and
Output;

SOURCE CODE INCLUDED? - Yes

MEDIA QUANTITY - 1 CD Rom

COMPUTER - SUN

OPERATING SYSTEMS - Any system that supports Fortran 77 compiler.

PROGRAMMING LANGUAGES - Fortran 77

SOURCE CODE AVAILABLE (Y/N) - Y

OTHER PROG/OPER SYS INFO - Input format: ASCII and Output format:
ASCII. To create Ztest, the simple example of the usage of Zlib
subroutine, you could use makefile in the /Scratch subdirectory. To
run Ztest make sure the input file (zpm), which contains a map
(4D, 6 order)for simple FODO lattice, exists in /Scratch
subdirectory. Output -mapFromConcat- result of concatenation of
this map with itself.

HARDWARE REQS - Size of ZLIB.0 is 335 KBytes

ABSTRACT STATUS - Submitted 6/22/95. Released AS-IS 6/29/95.

SUBJECT CLASS CODE - VW

KEYWORDS -
COMPUTER PROGRAM DOCUMENTATION
Z CODES
ALGEBRA
BEAM DYNAMICS
SUPERCONDUCTING SUPER COLLIDER
MAPPING
NONLINEAR PROBLEMS

E S T S C
ENERGY SCIENCE & TECHNOLOGY SOFTWARE CENTER
SOFTWARE ABSTRACT

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BEAM EXTRACTION
STORAGE RINGS

EDB SUBJECT CATEGORIES -
990200 430200

SPONSOR - DOE/ER

PACKAGE TYPE - AS - IS