

PACKAGE ID - 001026SGIIP00 BDL

KWIC TITLE - Beam Dynamics Laboratory

AUTHORS - Cole, B.
Superconducting Super Collider Laboratory,
Waxahachie, Tx, (United States)

Singleton, L.
Superconducting Super Collider Laboratory,
Waxahachie, Tx, (United States)

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

COMPLETION DATE - 05/01/1993 **PUBLICATION DATE** - 05/01/1993

DESCRIPTION - Simple model of an accelerator as it is running can be interactively manipulated to observe the effects of the manipulations of particle motion. The system can be used to demonstrate effects such as decoherence, slow-extraction, resonance islands, coupling resonance and synchro-betatron coupling.

PACKAGE CONTENTS - Media Directory; Software Abstract; READ.File (15 pages); Media Includes Source Code, Executable Module;

SOURCE CODE INCLUDED? - Yes

MEDIA QUANTITY - 1 CD Rom

METHOD OF SOLUTION - Iterates over a set of plotted particles, efficiently re-plotting the phase at each turn to give the ability to interactively manipulate the particles.

COMPUTER - SILICON GRAPHIC

OPERATING SYSTEMS - GL

PROGRAMMING LANGUAGES - C

SOFTWARE LIMITATIONS - Accelerator model is very simple.

SOURCE CODE AVAILABLE (Y/N) - Y

UNIQUE FEATURES - Ability to interactively manipulate an accelerator (model) as it is running.

RELATED SOFTWARE - X11, GL library

ABSTRACT STATUS - Submitted 6/22/95. Released AS-IS 7/7/95.

SUBJECT CLASS CODE - WV

KEYWORDS -

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

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COMPUTER PROGRAM DOCUMENTATION
B CODES
BEAM DYNAMICS
ACCELERATORS

EDB SUBJECT CATEGORIES -
990200 430200

SPONSOR - DOE/ER

PACKAGE TYPE - AS - IS