

NONLINEAR DYNAMICS STUDIES AT THE FNAL RECYCLER RING

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## ABSTRACT

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## **LIST OF ABBREVIATIONS**

<b>ASU</b>	Arizona State University
<b>MIT</b>	Massachusetts Institute of Technology
<b>MSU</b>	Michigan State University

## **CHAPTER 1**

### **INTRODUCTORY ACCELERATOR PHYSICS**

Let's start by assuming the most basic element of an accelerator is a black box. This black box takes some initial transverse coordinates  $x_0, x'_0, y_0, y'_0$ , as defined in a Frenet-Serret coordinate system.

**APPENDIX**  
**YOUR APPENDIX**