The Relativistic Mean-Field Theory

Jiangming Yao (尧江明)

中山大学物理与天文学院





J. M. Yao SPA/SYSU

Introduction

Introduction

- 1 Introduction
- 2 Relativistic Quantum Mechanics
- 3 The framework of RMF theory
- 4 RMF for nuclear matter
- 5 RMF for finite nuclei

Introduction

Introduction

•0

Why relativistic framework?







J. M. Yao SPA/SYSU



J. M. Yao SPA/SYSU

The framework of RMF theory

RMF



RMF



J. M. Yao SPA/SYSU

0

Nuclear matter



J. M. Yao SPA/SYSU RMF for finite nuclei

Coordinate space



17 / 19

J. M. Yao SPA/SYSU Nuclear Theory

Basis expansion



J. M. Yao SPA/SYSU

RMF for nuclear matter

Applications



