

# 第六届粒子物理天问论坛

2024年11月8日星期五 - 2024年11月12日星期二

## 摘要集



# Contents

|  |   |
|--|---|
| 开幕式：领导致辞/合影 . . . . .  | 1 |
| CEPC 介绍 . . . . .  | 1 |
| STCF 介绍 . . . . .  | 1 |
| EicC 介绍 . . . . .  | 1 |
| Axionlike particles at future colliders . . . . .  | 1 |
| A bright electron-positron annihilation line in the BOAT GRB221009A . . . . .                                | 1 |
| 高能中微子望远镜“海铃计划”进展与展望 . . . . .  | 1 |
| 锦屏中微子实验研究进展 . . . . .  | 2 |
| 讨论 . . . . .   | 2 |
| BESIII 上的粲物理 . . . . .   | 2 |
| Recent Charm Results at Belle II . . . . .   | 2 |
| Rare Decays at LHCb . . . . .  | 2 |
| BESIII 粲介子半轻衰变到矢量和标量介子末态的研究 . . . . .  | 2 |
| Search for Electromagnetic Dalitz decays $\chi_{cJ} \rightarrow e^+ e^- \phi$ . . . . .                      | 3 |
| 大亚湾实验中的中微子混合角 $\theta_{13}$ 测量最新结果 . . . . .   | 3 |
| Neutrinoless double beta decay of hyperons in covariant chiral perturbation theory . . . . .                 | 3 |
| 寻找缪子素的稀有衰变 . . . . .   | 3 |
| The study of dimuonium spectroscopy by solving Schrodinger equation with Gaussian expansion method . . . . . | 3 |
| Fragmentation function at low energy $e^+e^-$ . . . . .  | 3 |
| Quasi-two-body B decays in the presence of $K^{*+}$ and $K_0^{*-}$ (1430,1950) . . . . .                     | 3 |
| Productions of DK and relevant three-body molecules in B decays . . . . .                                    | 4 |
| R-ratio from Lattice QCD . . . . .   | 4 |

|  |   |
|--|---|
| Spectroscopic and two-body strong decay properties of possible $\Lambda_c K^*/\Sigma_c K^*$ molecules    | 4 |
| Hidden- and double-charm pentaquark states   | 4 |
| Study of $T_c(c\bar{s})$ (2900)  | 4 |
| Light single-gluon hybrid states with various exotic quantum numbers                                     | 4 |
| Isospin Violation Effect and Three-Body Decay of $T_{cc}$  | 5 |
| The PWA amplitudes in the covariant L-S scheme   | 5 |
| Investigation of the $D_s^+ \rightarrow K^+ \pi^+ \pi^-$ and $D_s^+ \rightarrow K_S^0 K_S^0 \pi^+$ decay | 5 |
| Neutrino-nucleus interactions with BChPT inputs  | 5 |
| Study of the electromagnetic form factors of the nucleons in the time-like region                        | 5 |
| 缪子电磁偶极矩实验的最新进展   | 5 |
| Semileptonic decay of $\Lambda_b$ baryon   | 6 |
| Topological amplitudes of charmed baryon decays in the SU(3) limit                                       | 6 |
| Form factors and the light-cone distribution amplitudes of light pseudoscalar mesons                     | 6 |
| Close  | 6 |
| 自由讨论   | 6 |

1

## 开幕式：领导致辞/合影

2

## CEPC 介绍

相应作者: manqi.ruan@ihep.ac.cn

3

## STCF 介绍

相应作者: hgs@ustc.edu.cn

4

## EicC 介绍

相应作者: liangyt@impcas.ac.cn

5

## Axionlike particles at future colliders

相应作者: shuoyanglnnu@163.com

6

## A bright electron-positron annihilation line in the BOAT GRB221009A

相应作者: zhangzhen@ihep.ac.cn

7

## 高能中微子望远镜“海铃计划”进展与展望

相应作者: tdli.hjt@sjtu.edu.cn

8

## 锦屏中微子实验研究进展

相应作者: jinjing-li@foxmail.com

9

## 讨论

10

## BESIII 上的粲物理

相应作者: baiciank@ihep.ac.cn

11

## Recent Charm Results at Belle II

相应作者: lilongke@mail.ustc.edu.cn

12

## Rare Decays at LHCb

相应作者: sunl@whu.edu.cn

13

## BESIII 粲介子半轻衰变到矢量和标量介子末态的研究

相应作者: maheng@mail.ynu.edu.cn

14

**Search for Electromagnetic Dalitz decays  $\chi_c \rightarrow e^+ e^- \phi$**

相应作者: chenzhuo0116@hunnu.edu.cn

15

**大亚湾实验中的中微子混合角  $\theta_{13}$  测量最新结果**

相应作者: jinjing-li@foxmail.com

16

**Neutrinoless double beta decay of hyperons in covariant chiral perturbation theory**

相应作者: 1067150643@qq.com

17

**寻找缪子素的稀有衰变**

相应作者: chensy339@mail2.sysu.edu.cn

18

**The study of dimuonium spectroscopy by solving Schrodinger equation with Gaussian expansion method**

19

**Fragmentation function at low energy  $e^+e^-$**

相应作者: wenbiao@ustc.edu.cn

20

**Quasi-two-body B decays in the presence of K<sup>+</sup>\* and K\_0<sup>+</sup>\* (1430,1950)**

相应作者: zhangzhiqing@haut.edu.cn

21

**Productions of DK and relevant three-body molecules in B decays**

相应作者: liumz@lzu.edu.cn

22

**R-ratio from Lattice QCD**

相应作者: wangn\_63@163.com

23

**Spectroscopic and two-body strong decay properties of possible  $\Lambda_c K^*$  /  $\Sigma_c K^*$  molecules**

相应作者: chenrui@hunnu.edu.cn

24

**Hidden- and double-charm pentaquark states**

相应作者: yrliu@sdu.edu.cn

25

**Study of T\_(cs<sup>-</sup>) (2900)**

相应作者: duanmanyuzzu@163.com

26

**Light single-gluon hybrid states with various exotic quantum numbers**

相应作者: 2909106890@qq.com

27

**Isospin Violation Effect and Three-Body Decay of Tcc**

相应作者: sunzf@lzu.edu.cn

28

**The PWA amplitudes in the covariant L-S scheme**

相应作者: wujiajun@ucas.ac.cn

29

**Investigation of the  $D_s^+$   $\rightarrow K^+ \pi^+ \pi^-$  and  $D_s^+ \rightarrow K_S^0 K_S^0 \pi^+$  decay**

相应作者: 212201014@csu.edu.cn

30

**Neutrino-nucleus interactions with BChPT inputs**

31

**Study of the electromagnetic form factors of the nucleons in the time-like region**

相应作者: yqh@hnu.edu.cn

32

## 缪子电磁偶极矩实验的最新进展

相应作者: kimsiang84@sjtu.edu.cn

33

## Semileptonic decay of $\Lambda_b$ baryon

相应作者: duanhuihui@htu.edu.cn

34

## Topological amplitudes of charmed baryon decays in the SU(3) limit

相应作者: wangdi@hunnu.edu.cn

35

## Form factors and the light-cone distribution amplitudes of light pseudoscalar mesons

相应作者: physchai@yeah.net

36

## Close

37

## 自由讨论