

# The APJ title

F. P. AN,<sup>1</sup> A. B. BALANTEKIN,<sup>2</sup> H. R. BAND,<sup>3</sup> M. BISHAI,<sup>4</sup> S. BLYTH,<sup>5</sup> G. F. CAO,<sup>6</sup> J. CAO,<sup>6</sup> J. F. CHANG,<sup>6</sup> Y. CHANG,<sup>7</sup>  
H. S. CHEN,<sup>6</sup> S. M. CHEN,<sup>8</sup> Y. CHEN,<sup>9,10</sup> Y. X. CHEN,<sup>11</sup> J. CHENG,<sup>6</sup> Z. K. CHENG,<sup>10</sup> J. J. CHERWINKA,<sup>2</sup> M. C. CHU,<sup>12</sup>  
J. P. CUMMINGS,<sup>13</sup> O. DALAGER,<sup>14</sup> F. S. DENG,<sup>15</sup> Y. Y. DING,<sup>6</sup> M. V. DIWAN,<sup>4</sup> T. DOHNAL,<sup>16</sup> J. DOVE,<sup>17</sup> M. DVOŘÁK,<sup>16</sup>  
D. A. DWYER,<sup>18</sup> J. P. GALLO,<sup>19</sup> M. GONCHAR,<sup>20</sup> G. H. GONG,<sup>8</sup> H. GONG,<sup>8</sup> W. Q. GU,<sup>4</sup> J. Y. GUO,<sup>10</sup> L. GUO,<sup>8</sup>  
X. H. GUO,<sup>21</sup> Y. H. GUO,<sup>22</sup> Z. GUO,<sup>8</sup> R. W. HACKENBURG,<sup>4</sup> S. HANS,<sup>4,\*</sup> M. HE,<sup>6</sup> K. M. HEEGER,<sup>3</sup> Y. K. HENG,<sup>6</sup>  
A. HIGUERA,<sup>23</sup> Y. K. HOR,<sup>10</sup> Y. B. HSIUNG,<sup>5</sup> B. Z. HU,<sup>5</sup> J. R. HU,<sup>6</sup> T. HU,<sup>6</sup> Z. J. HU,<sup>10</sup> H. X. HUANG,<sup>24</sup> X. T. HUANG,<sup>25</sup>  
P. HUBER,<sup>26</sup> D. E. JAFFE,<sup>4</sup> K. L. JEN,<sup>27</sup> X. L. JI,<sup>6</sup> X. P. JI,<sup>4</sup> R. A. JOHNSON,<sup>28</sup> D. JONES,<sup>29</sup> L. KANG,<sup>30</sup> S. H. KETTEL,<sup>4</sup>  
S. KOHN,<sup>31</sup> M. KRAMER,<sup>18,31</sup> T. J. LANGFORD,<sup>3</sup> J. LEE,<sup>18</sup> J. H. C. LEE,<sup>32</sup> R. T. LEI,<sup>30</sup> R. LEITNER,<sup>16</sup> J. K. C. LEUNG,<sup>32</sup>  
F. LI,<sup>6</sup> H. L. LI,<sup>6</sup> J. J. LI,<sup>8</sup> Q. J. LI,<sup>6</sup> S. LI,<sup>30</sup> S. C. LI,<sup>26</sup> W. D. LI,<sup>6</sup> X. N. LI,<sup>6</sup> X. Q. LI,<sup>33</sup> Y. F. LI,<sup>6</sup> Z. B. LI,<sup>10</sup>  
H. LIANG,<sup>15</sup> C. J. LIN,<sup>18</sup> G. L. LIN,<sup>27</sup> S. LIN,<sup>30</sup> J. J. LING,<sup>10</sup> J. M. LINK,<sup>26</sup> L. LITTENBERG,<sup>4</sup> B. R. LITTLEJOHN,<sup>19</sup>  
J. C. LIU,<sup>6</sup> J. L. LIU,<sup>34</sup> C. LU,<sup>35</sup> H. Q. LU,<sup>6</sup> J. S. LU,<sup>6</sup> K. B. LUK,<sup>31,18</sup> X. B. MA,<sup>11</sup> X. Y. MA,<sup>6</sup> Y. Q. MA,<sup>6</sup>  
C. MARSHALL,<sup>18</sup> D. A. MARTINEZ CAICEDO,<sup>19</sup> K. T. McDONALD,<sup>35</sup> R. D. MCKEOWN,<sup>36,37</sup> Y. MENG,<sup>34</sup> J. NAPOLITANO,<sup>29</sup>  
D. NAUMOV,<sup>20</sup> E. NAUMOVA,<sup>20</sup> J. P. OCHOA-RICOUX,<sup>14</sup> J. P. OCHOA-RICOUX,<sup>14</sup> A. OLSHEVSKIY,<sup>20</sup> H.-R. PAN,<sup>5</sup> J. PARK,<sup>26</sup>  
S. PATTON,<sup>18</sup> J. C. PENG,<sup>17</sup> C. S. J. PUN,<sup>32</sup> F. Z. QI,<sup>6</sup> M. QI,<sup>38</sup> X. QIAN,<sup>39</sup> N. RAPER,<sup>10</sup> J. REN,<sup>24</sup> C. MORALES REVECO,<sup>14</sup>  
R. ROSERO,<sup>4</sup> B. ROSKOVEC,<sup>14</sup> X. C. RUAN,<sup>24</sup> H. STEINER,<sup>31,18</sup> J. L. SUN,<sup>39</sup> T. TMEJ,<sup>16</sup> K. TRESKOV,<sup>20</sup> W.-H. TSE,<sup>12</sup>  
C. E. TULL,<sup>18</sup> B. VIREN,<sup>4</sup> V. VOROBEL,<sup>16</sup> C. H. WANG,<sup>7</sup> J. WANG,<sup>10</sup> M. WANG,<sup>25</sup> N. Y. WANG,<sup>21</sup> R. G. WANG,<sup>6</sup>  
W. WANG,<sup>10,37</sup> W. WANG,<sup>38</sup> X. WANG,<sup>40</sup> Y. WANG,<sup>38</sup> Y. F. WANG,<sup>6</sup> Z. WANG,<sup>6</sup> Z. WANG,<sup>8</sup> Z. M. WANG,<sup>6</sup> H. Y. WEI,<sup>4</sup>  
L. H. WEI,<sup>6</sup> L. J. WEN,<sup>6</sup> K. WHISNANT,<sup>41</sup> C. G. WHITE,<sup>19</sup> H. L. H. WONG,<sup>31,18</sup> E. WORCESTER,<sup>4</sup> D. R. WU,<sup>6</sup>  
F. L. WU,<sup>38</sup> Q. WU,<sup>25</sup> W. J. WU,<sup>6</sup> D. M. XIA,<sup>42</sup> Z. Q. XIE,<sup>6</sup> Z. Z. XING,<sup>6</sup> J. L. XU,<sup>6</sup> T. XU,<sup>8</sup> T. XUE,<sup>8</sup> C. G. YANG,<sup>6</sup>  
L. YANG,<sup>30</sup> Y. Z. YANG,<sup>8</sup> H. F. YAO,<sup>6</sup> M. YE,<sup>6</sup> M. YEH,<sup>4</sup> B. L. YOUNG,<sup>41</sup> H. Z. YU,<sup>10</sup> Z. Y. YU,<sup>6</sup> B. B. YUE,<sup>10</sup> S. ZENG,<sup>6</sup>  
Y. ZENG,<sup>10</sup> L. ZHAN,<sup>6</sup> C. ZHANG,<sup>4</sup> F. Y. ZHANG,<sup>34</sup> H. H. ZHANG,<sup>10</sup> J. W. ZHANG,<sup>6</sup> Q. M. ZHANG,<sup>22</sup> X. T. ZHANG,<sup>6</sup>  
Y. M. ZHANG,<sup>10</sup> Y. X. ZHANG,<sup>39</sup> Y. Y. ZHANG,<sup>34</sup> Z. J. ZHANG,<sup>30</sup> Z. P. ZHANG,<sup>15</sup> Z. Y. ZHANG,<sup>6</sup> J. ZHAO,<sup>6</sup> L. ZHOU,<sup>6</sup>  
H. L. ZHUANG,<sup>6</sup> AND J. H. ZOU<sup>6</sup>

<sup>1</sup>*Institute of Modern Physics, East China University of Science and Technology, Shanghai*

<sup>2</sup>*University of Wisconsin, Madison, Wisconsin 53706*

<sup>3</sup>*Wright Laboratory and Department of Physics, Yale University, New Haven, Connecticut 06520*

<sup>4</sup>*Brookhaven National Laboratory, Upton, New York 11973*

<sup>5</sup>*Department of Physics, National Taiwan University, Taipei*

<sup>6</sup>*Institute of High Energy Physics, Beijing*

<sup>7</sup>*National United University, Miao-Li*

<sup>8</sup>*Department of Engineering Physics, Tsinghua University, Beijing*

<sup>9</sup>*Shenzhen University, Shenzhen*

<sup>10</sup>*Sun Yat-Sen (Zhongshan) University, Guangzhou*

<sup>11</sup>*North China Electric Power University, Beijing*

<sup>12</sup>*Chinese University of Hong Kong, Hong Kong*

<sup>13</sup>*Siena College, Loudonville, New York 12211*

<sup>14</sup>*Department of Physics and Astronomy, University of California, Irvine, California 92697*

<sup>15</sup>*University of Science and Technology of China, Hefei*

<sup>16</sup>*Charles University, Faculty of Mathematics and Physics, Prague*

<sup>17</sup>*Department of Physics, University of Illinois at Urbana-Champaign, Urbana, Illinois 61801*

<sup>18</sup>*Lawrence Berkeley National Laboratory, Berkeley, California 94720*

<sup>19</sup>*Department of Physics, Illinois Institute of Technology, Chicago, Illinois 60616*

<sup>20</sup>*Joint Institute for Nuclear Research, Dubna, Moscow Region*

<sup>21</sup>*Beijing Normal University, Beijing*

<sup>22</sup>*Department of Nuclear Science and Technology, School of Energy and Power Engineering, Xi'an Jiaotong University, Xi'an*

<sup>23</sup>*Department of Physics, University of Houston, Houston, Texas 77204*

<sup>24</sup>*China Institute of Atomic Energy, Beijing*

<sup>25</sup>*Shandong University, Jinan*

<sup>26</sup>*Center for Neutrino Physics, Virginia Tech, Blacksburg, Virginia 24061*

<sup>27</sup>*Institute of Physics, National Chiao-Tung University, Hsinchu*

<sup>28</sup>*Department of Physics, University of Cincinnati, Cincinnati, Ohio 45221*

<sup>29</sup>*Department of Physics, College of Science and Technology, Temple University, Philadelphia, Pennsylvania 19122*

<sup>30</sup>*Dongguan University of Technology, Dongguan*

<sup>31</sup>*Department of Physics, University of California, Berkeley, California 94720*

<sup>32</sup>*Department of Physics, The University of Hong Kong, Pokfulam, Hong Kong*

<sup>33</sup>*School of Physics, Nankai University, Tianjin*

<sup>34</sup>*Department of Physics and Astronomy, Shanghai Jiao Tong University, Shanghai Laboratory for Particle Physics and Cosmology, Shanghai*

<sup>35</sup>*Joseph Henry Laboratories, Princeton University, Princeton, New Jersey 08544*

<sup>36</sup>*California Institute of Technology, Pasadena, California 91125*

<sup>37</sup>*College of William and Mary, Williamsburg, Virginia 23187*

<sup>38</sup>*Nanjing University, Nanjing*

<sup>39</sup>*China General Nuclear Power Group, Shenzhen*

<sup>40</sup>*College of Electronic Science and Engineering, National University of Defense Technology, Changsha*

<sup>41</sup>*Iowa State University, Ames, Iowa 50011*

<sup>42</sup>*Chongqing University, Chongqing*

## ABSTRACT

This is the abstract.

## 1. INTRODUCTION

This would be the introduction.

\* Now at Department of Chemistry and Chemical Technology, Bronx Community College, Bronx, New York 10453