

# KYUNGYUK CHAE

---

Department of Physics  
Sungkyunkwan University  
2066 Seobu-ro, Suwon  
Korea 16419

kchae@skku.edu  
andy@chae.me  
+82-31-299-4547  
<http://nucastro.skku.edu>

last updated on  
October 12, 2018

---

## EXPERIENCE

- **Associate Professor**, Department of Physics, Sungkyunkwan University Mar. 2016 - Present
- **Guest Associate Professor**, Department of Physics, University of Notre Dame Jan. 2018 - Present
- **Assistant Professor**, Department of Physics, Sungkyunkwan University Mar. 2012 - Feb. 2016
- **Research Scientist**, Oak Ridge National Laboratory Jan. 2011 - Dec. 2011
- **Postdoctoral Research Associate**, Oak Ridge National Laboratory Sep. 2009 - Dec. 2010
- **Postdoctoral Research Associate**, University of Tennessee at Knoxville Jan. 2007 - Aug. 2009
- **Research Assistant**, Oak Ridge National Laboratory Aug. 2003 - Dec. 2006
- **Research Assistant**, University of Tennessee at Knoxville Jan. 2002 - Jul. 2003
- **Military Service**, Ministry of National Defense, Republic of Korea Jan. 1996 - Mar. 1998

## EDUCATION

- **University of Tennessee at Knoxville**, TN 37996, USA Aug. 2001 - Dec. 2006  
**Ph.D. in Physics**, December 2006  
Dissertation: “Interference effects among  $J^\pi=3/2^+$  resonances in  $^{19}\text{Ne}$  system & Searching for resonances in the unbound  $^6\text{Be}$  nucleus”  
Advisor: Prof. Michael Guidry
- **Sogang University**, Seoul, South Korea Mar. 1994 - Feb. 2000  
**B.S. in Physics (major), Mathematics (minor)**, February 2000

## GRANTS

- **Participating Researcher**, Ministry of Science, 4,000,000,000 KRW Jun. 2018 - Present  
“Project for International Collaboration Research of Utilizing RAON”
- **PI**, LG Yonam Foundation, 40,000 USD Jan. 2018 - Present  
“Developing transfer reaction measurement technique using heavy ion beams”

# KYUNGYUK CHAE

---

- **Participating Researcher**, Ministry of Science, 8,600,000,000 KRW Jul. 2016 - Present  
“Center for High Energy Astrophysics”
- **PI**, Ministry of Science, 90,000,000 KRW Mar. 2016 - Present  
“Study of the  $\alpha$ -cluster structure of radionuclide  $^{22}\text{Mg}$ ”
- **PI**, Ministry of Education, 154,440,000 KRW Nov. 2015 - Present  
“Nuclear astrophysics study using position sensitive ionization chamber”
- **PI**, Ministry of Science, 100,000,000 KRW Jan. 2017 - Dec. 2017  
“Detailed design and commissioning of KOBRA detector systems”
- **Participating Researcher**, Ministry of Science, 25,000,000 KRW Dec. 2016 - Sep. 2017  
“Study of identifying topics in nuclear astrophysics using KOBRA”
- **PI**, Ministry of Science, 150,000,000 KRW Jan. 2016 - Dec. 2016  
“Designing and constructing detector systems for KOBRA”
- **PI**, Ministry of Education, 396,000,000 KRW Sep. 2014 - Aug. 2017  
“Study of astrophysically important energy levels in Mg isotopes”
- **PI**, Ministry of Science, 30,000,000 KRW Jun. 2014 - May 2015  
“Commissioning of portable ion counter using MC-50 proton beams”
- **PI**, Ministry of Science, 100,000,000 KRW Aug. 2013 - Feb. 2014  
“Detailed design of focal plane detection system and Gamma-array for Recoil spectrometer”
- **Participating Researcher**, Ministry of Education, 60,000,000 KRW Oct. 2012 - Apr. 2013  
“Research on the Creation of New National Industry Using High Energy Particle Accelerator Technology”
- **Participating Researcher**, IBS, 550,000,000 KRW Oct. 2012 - Apr. 2013  
“Detailed Design of Sub-system for Detectors and Experimental Equipments”
- **PI**, Ministry of Education, 153,270,000 KRW Sep. 2012 - Aug. 2015  
“Research on Nuclear Astrophysics and Structure using Heavy Ion Beams”
- **PI**, Sungkyunkwan University, 15,000,000 KRW Jul. 2012 - June 2013  
“Nuclear reaction evaluation for astrophysical phenomenon”
- **PI**, Ministry of Education, 60,000,000 KRW Jun. 2012 - May 2014  
“Developing portable fast ionization chamber”

## AWARDS

- Best Presentation Award  
“Constraining the spins of energy levels in  $^{21}\text{Na}$  nucleus through the  $^{24}\text{Mg}(p,\alpha)^{21}\text{Na}$  reaction”  
Korean Physical Society (2015).
- Director’s award for outstanding team accomplishment in Science and Technology,  
Oak Ridge National Laboratory (2010).
- Outstanding team accomplishment in Scientific Research, Oak Ridge National Laboratory (2010).

## TEACHING EXPERIENCE

# KYUNGYUK CHAE

---

- **Associate Professor**, Sungkyunkwan University Mar. 2016 - Present  
Nuclear Physics: Fall 2016, Fall 2017  
General Physics I: Spring 2016, Spring 2017  
Graduate students mentored: Minsik Kwag, Soomi Cha, Eunji Lee, Jaeha Lee, Minju Kim, Duhyun Kim, Kim Uyen Nguyen  
Undergraduate students mentored: Duhyun Kim, Minhyeok Kang  
Post-scholars mentored: Aram Kim, Nguyen Ngoc Duy, Sangin Bak
- **Assistant Professor**, Sungkyunkwan University Mar. 2012 - Feb. 2016  
Nuclear Astrophysics I: Spring 2015  
Nuclear Astrophysics II: Fall 2015  
Nuclear Physics: Fall 2012, Fall 2013, Fall 2014, Fall 2015  
General Physics I: Spring 2012, Spring 2013, Spring 2014, Spring 2015  
Graduate students mentored: Minsik Kwag, Soomi Cha, Eunji Lee, Jaeha Lee  
Undergraduate students mentored: Minsik Kwag, Soomi Cha, Eunji Lee, Jaeha Lee, Minju Kim, Duhyun Kim  
Post-scholars mentored: Aram Kim

## WORKSHOPS

- Origin of Matter and Evolution of Galaxies (OMEG 2017) June 2017  
Daejeon, Korea  
Organizing Committee
- SKKU mini workshop October 2016  
Suwon, Korea  
Chair
- The 2nd Sicily-East Asia Workshop on Low-energy Nuclear Physics June 2016  
the University of Tokyo, Japan  
Chair
- SKKU International Symposium on Recent Progress in Physics November 2014  
Suwon, Korea  
Scientific Secretary
- SKKU Symposium on Astrophysics and Cosmology: from Particle to Universe December 2013  
Suwon, Korea  
Organizing Committee
- Workshop on experimental nuclear studies using RIBs October 2013  
Suwon, Korea  
Organizing Committee
- SKKU Symposium on Astrophysics and Cosmology: from Particle to Universe August 2012  
Suwon, Korea  
Organizing Committee

## LANGUAGES

- Korean: native language
- English: fluent

# KYUNGYUK CHAE

---

CITIZENSHIP: REPUBLIC OF KOREA (SOUTH KOREA)

# KYUNGYUK CHAE

---

## INVITED TALKS

- “Nuclear Astrophysics Experiments using KOBRA”  
**K.Y. Chae**  
Accelerator Science Department Seminar  
Korea University, Sejong, Korea, December 13, 2017
- “Understanding Explosive Stellar Events using Rare Isotope Beams: Experimental Nuclear Astrophysics”  
**K.Y. Chae**  
2017 Korean Astronomical Society Fall Meeting  
Expo Convention Center, Yeosu, Korea, October 13, 2017
- “The  $^{26g}\text{Al}(p,\gamma)^{27}\text{Si}$  reaction rate for astrophysical implication”  
**K.Y. Chae**  
2017 2nd CHEA Workshop  
UNIST, Ulsan, Korea, April 7, 2017
- “The  $^{18}\text{Ne}(\alpha,\alpha)^{18}\text{Ne}$  reaction measurement for the astrophysical  $^{18}\text{Ne}(\alpha,p)^{21}\text{Na}$  reaction rate”  
**K.Y. Chae**  
2017 1st CHEA Workshop  
Haeundae Grand Hotel, Busan, Korea, January 17, 2017
- “Nuclear astrophysics: the origin of chemical elements”  
**K.Y. Chae**  
Physics Department Colloquium  
UNIST, Ulsan, Korea, November 23, 2016
- “Measurement of the  $^{18}\text{Ne}+\alpha$  system for the  $\alpha$ -cluster structure in  $^{22}\text{Mg}$ ”  
**K.Y. Chae**  
2016 IBS Annual Meeting (2016)  
Daejeon, Korea, November 17 - 18, 2016
- “Low-energy nuclear physics measurements at KOBRA”  
**K.Y. Chae**  
2nd Sicily-East Asia Workshop (2016)  
RIKEN, Japan, June 26 - 29, 2016
- “Study of a cluster structure in  $^{22}\text{Mg}$ : Actually, the  $^{22}\text{Ne}+\alpha$  system!”  
**K.Y. Chae**  
2nd Studies on Rare Isotope based Nuclear Physics (2016)  
Korea Aerospace University, Goyang, Korea, April 8, 2016
- “Proposals of the day-1 experiments at KOBRA”  
**K.Y. Chae**  
Japan-Korea Joint Session of the 71th JPS Annual Meeting  
Tohoku Gakuin University, Sendai, Japan, March 19 - 22, 2016
- “The Separator for Capture Reaction, SECAR”  
**K.Y. Chae**  
1st Studies on Rare Isotope based Nuclear Physics (2016)  
Ewha Womans University, Seoul, Korea, January 7, 2016
- “The astrophysical  $^{26g}\text{Al}(p,\gamma)^{27}\text{Si}$  destruction rate”  
**K.Y. Chae**

# KYUNGYUK CHAE

---

Frontiers of Physics

The Ocean Resort, Yeosu, Korea, December 20 - 23, 2015

- “Supersonic gas jet target system for low energy nuclear physics experiments”  
**K.Y. Chae**  
KOBRA workshop  
RISP, Daejeon, Korea, November 21, 2015
- “The greatest alchemist in the Universe”  
**K.Y. Chae**  
Physics Department Colloquium  
Korea University, Seoul, Korea, November 3, 2015
- “Explosive Stars: the Alchemist”  
**K.Y. Chae**  
Physics Department Colloquium  
Kyungpook National University, Daegu, Korea, October 15, 2015
- “Possible day-1 experiment at KOBRA”  
**K.Y. Chae**  
KOBRA workshop  
RISP, Daejeon, Korea, August 13 - 14, 2015
- “Constraint of the astrophysical  $^{26g}\text{Al}(p,\gamma)^{27}\text{Si}$  destruction rate”  
**K.Y. Chae**  
Nuclear-Astrophysics: Theory and Experiments  
APCTP, Pohang, Korea, July 17 - 18, 2015
- “Low energy facility of RAON and supersonic gas jet target”  
**K.Y. Chae**  
Joint US-Korea Exploratory Workshop on Opportunities for Collaboration in Nuclear Science  
Facility for Rare Isotope Beams, East Lansing, USA, May 14 - 15, 2015
- “Instruments for scientific researches at NSCL”  
**K.Y. Chae**  
2nd Studies on Rare Isotope based Nuclear Physics (2015)  
Chung-Ang University, Seoul, Korea, February 26, 2015
- “International Collaborations for Low Energy Experiments at RAON”  
**K.Y. Chae**  
1st Studies on Rare Isotope based Nuclear Physics (2015)  
Yonsei University, Seoul, Korea, January 9, 2015
- “Transfer reaction studies on  $^{24}\text{Mg}$  for astrophysical implications”  
**K.Y. Chae**  
Korean Physical Society 2014 Fall Meeting, Pioneering Symposium  
Kim Dae Jung Convention Center, Gwangju, Korea, October 22 - 24, 2014
- “Transfer reaction studies on  $^{24}\text{Mg}$ ”  
**K.Y. Chae**  
18th Workshop on Astro-Nuclear Physics  
Soongsil University, Seoul, Korea, August 18 - 20, 2014
- “Radioactive Ion Beam Facility in Korea, RAON”  
**K.Y. Chae**

# KYUNGYUK CHAE

---

1st Sicily-East Asia Workshop

Sala Consiglio, SDS Architettura, Ortigia, Italy, July 28 - 31, 2014

- “Experimental Nuclear Astrophysics”  
**K.Y. Chae**  
3rd Studies on Rare Isotope based Nuclear Physics  
Korea Aerospace University, Goyang, Korea, April 11, 2014
- “Target and detector systems for KOBRA”  
**K.Y. Chae**  
1st RIBF-RISP Joint Workshop,  
RISP, Daejeon, Korea, November 7 - 8, 2013
- “Connection between CNO cycle and  $rp$ -process”  
**K.Y. Chae**  
Rare Isotopes and Nuclear Astrophysics with related topics Workshop,  
APCTP, Pohang, Korea, September 25 - 27, 2013
- “Thinking Star Dust: Experimental Nuclear Astrophysics”  
**K.Y. Chae**  
Physics Department Colloquium,  
Sogang University, Seoul, Korea, June 4, 2013
- “Gas Jet Target for Astrophysically Important Nuclear Reaction Studies using Radioactive Ion Beams”  
**K.Y. Chae**  
Korean Physical Society 2013 Spring Meeting, Pioneering Symposium,  
Daejeon Convention Center, Daejeon, Korea, April 24 - 26, 2013
- “New Era of Experimental Nuclear Astrophysics”  
**K.Y. Chae**  
Physics Department Colloquium,  
Chung Ang University, Seoul, Korea, April 1, 2013
- “Nuclear Astrophysics Experiments using Radioactive Ion Beams”  
**K.Y. Chae**  
2012 Nuclear Physics School,  
Asia Pacific Center for Theoretical Physics, Pohang, Korea, June 25 - 29, 2012
- “Study of  $^{18}\text{F} + p$  Resonances Relevant for Novae”  
**K.Y. Chae**  
Korean Physical Society 2012 Spring Meeting,  
Daejeon Convention Center, Daejeon, Korea, April 25 - 27, 2012
- “Cooking up elements in the universe: Nuclear astrophysics with exotic ion beams”  
**K.Y. Chae**  
Physics Department Colloquium,  
Sungkyunkwan University, Suwon, Korea, April 4, 2012
- “Bringing stellar reactions to earth”  
**K.Y. Chae**  
Sungkyunkwan University, Suwon, Korea, June 17, 2011
- “Overview of Nuclear Reaction Measurements for Basic Nuclear Science and Astrophysics”  
**K.Y. Chae**

# KYUNGYUK CHAE

---

Stockpile Stewardship Academic Alliance Meeting,  
Lawrence Livermore National Laboratory, Livermore, California, USA, May 23 - 24, 2011

- “Cooking up elements in the universe: Recent activities at HRIBF”  
**K.Y. Chae**  
Nuclear Physics Group Seminar,  
Sungkyunkwan University, Suwon, Korea, August 11, 2009
- “We are stardust: Recent activities in nuclear astrophysics at ORNL”  
**K.Y. Chae**  
Nuclear Physics Group Seminar,  
Chung Ang University, Seoul, Korea, August 10, 2009
- “Cooking up elements in explosive stars”  
**K.Y. Chae**  
Nuclear Physics Group Seminar,  
Pusan National University, Pusan, Korea, May 16, 2008
- “Spin assignments of  $^{22}\text{Mg}$  through a  $^{24}\text{Mg}(p, t)^{22}\text{Mg}$  measurement”  
**K.Y. Chae**  
Nuclear Physics Group Seminar,  
University of Tennessee, Knoxville, USA, April 21, 2008
- “Interference effects among  $J^\pi=3/2^+$  resonances in  $^{19}\text{Ne}$  system”  
**K.Y. Chae**  
Nuclear Physics Group Seminar,  
University of Tennessee, Knoxville, USA, February 19, 2007
- “First experimental constraints on the interference of  $3/2^+$  resonances in the  $^{18}\text{F}(p, \alpha)^{15}\text{O}$  reaction”  
**K.Y. Chae**, D.W. Bardayan, J.C. Blackmon, D. Gregory, M.W. Guidry, M.S. Johnson, R.L. Kozub, R.J. Livesay, Z. Ma, C.D. Nesaraja, S.D. Pain, S. Paulaskas, M. Porter-Peden, J.F. Shriner Jr., N. Smith, M.S. Smith, J.S. Thomas  
HRIBF workshop on nuclear measurements for astrophysics,  
Oak Ridge, Tennessee, USA, October 23 - 24, 2006

## PRESENTATIONS

- “New method of measuring low-energy ( $\alpha, p$ ) reactions in inverse kinematics”  
**K.Y. Chae**, S. Ahn, A. Ayres, D.W. Bardayan, A. Bey, U. Greife, M.E. Howard, K.L. Jones, R.L. Kozub, M. Matos, B.H. Moazen, C.D. Nesajara, P.D. O’Malley, W.A. Peters, S.T. Pittman, M.S. Smith  
2018 JINA-CEE Frontiers in Nuclear Astrophysics,  
University of Notre Dame, Notre Dame, Indiana, USA, May 21 - 25, 2018
- “Study of the  $^2\text{H}(^7\text{Be}, p+^3\text{He}+^4\text{He})n$  reaction for resonances in  $^8\text{B}$ ”  
**K.Y. Chae**  
The 21th International Conference on Accelerators and Beam Utilizations,  
Hwabaek International Convention Center, Gyeongju, Korea, November 15 - 17, 2017
- “Spectroscopic study of radionuclide  $^{21}\text{Na}$  for the astrophysical  $^{17}\text{F}(\alpha, p)^{20}\text{Ne}$  reaction rate”  
**K.Y. Chae**  
Korean Physical Society 2017 Fall Meeting,  
Hwabaek International Convention Center, Gyeongju, Korea, October 25 - 27, 2017



# KYUNGYUK CHAE

---

- “Construction and Commissioning of a Position-Sensitive Ionization Chamber”  
**K.Y. Chae**  
Korean Physical Society 2016 Spring Meeting,  
Daejeon Convention Center, Daejeon, Korea, April 20 - 22, 2016
- “Study of the  $^{26}\text{Al}(d,p)^{27}\text{Al}$  reaction for the astrophysical  $^{26g}\text{Al}(p,\gamma)^{27}\text{Si}$  reaction rate”  
**K.Y. Chae**, M.S. Gwak, S.M. Cha, S.W. Jo  
Korean Physical Society 2015 Fall Meeting,  
Hwabaek Center, Gyeongju, Korea, October 21 - 23, 2015
- “Developing portable fast ionization chamber”  
**K.Y. Chae**, M.S. Gwak, S.M. Cha, S.W. Jo  
Korean Physical Society 2013 Spring Meeting,  
Daejeon Convention Center, Daejeon, Korea, April 24 - 26, 2013
- “Searching for resonances in the unbound  $^6\text{Be}$  nucleus”  
**K.Y. Chae**, D.W. Bardayan, J.C. Blackmon, Z. Ma, C.D. Nesaraja, M.S. Smith, A.E. Champagne, R.P. Fitzgerald, D.W. Visser, J.J. Das, V. Guimaraes, K.L. Jones, S.D. Pain, J.S. Thomas, M.S. Johnson, R.L. Kozub, R.J. Livesay  
Korean Physical Society 2012 Fall Meeting,  
Phoenix Park, Pyeongchang, Korea, October 24 - 26, 2012
- “Developing a fast ionization chamber for transfer reaction studies”  
**K.Y. Chae**, S.H. Ahn, D.W. Bardayan, B. Manning, S.D. Pain, W.A. Peters, K.T. Schmitt, M.S. Smith, S. Strauss  
The Annual Meeting of the Division of Nuclear Physics of the American Physics Society,  
East Lansing, Michigan, USA, October 26 - 29, 2011.
- “Study of the  $^{19}\text{F}(\alpha,p)^{22}\text{Ne}$  reaction with an extended gas target”  
**K.Y. Chae**, S.H. Ahn, A. Ayres, D.W. Bardayan, A. Bey, M.E. Howard, K.L. Jones, R.L. Kozub, M. Matos, B.H. Moazen, C.D. Nesaraja, P.D. O’Malley, W.A. Peters, S.T. Pittman, M.S. Smith  
The Annual Meeting of the Division of Nuclear Physics of the American Physics Society,  
Santa Fe, New Mexico, USA, November 2 - 6, 2010.
- “A new technique for measuring astrophysically important  $(\alpha,p)$  reactions”  
**K.Y. Chae**, S.H. Ahn, A. Ayres, D.W. Bardayan, A. Bey, M.E. Howard, K.L. Jones, R.L. Kozub, M. Matos, B.H. Moazen, C.D. Nesaraja, P.D. O’Malley, W.A. Peters, S.T. Pittman, M.S. Smith  
Nuclei in the Cosmos XI,  
Heidelberg, Germany, July 19 - 23, 2010.
- “Spin assignments to excited states in  $^{22}\text{Na}$  through a  $^{24}\text{Mg}(p,^3\text{He})^{22}\text{Na}$  reaction measurement”  
**K.Y. Chae**, D.W. Bardayan, J.C. Blackmon, B.H. Moazen, K.A. Chipps, R. Hatarik, K.L. Jones, R.L. Kozub, J.F. Liang, C.D. Nesaraja, P.D. O’Malley, C. Matei, S.D. Pain, S.T. Pittman, M.S. Smith  
The April Meeting 2010 of the American Physical Society,  
Washington D.C., USA, February 13 - 17, 2010.
- “Spin assignments of  $^{22}\text{Mg}$  levels through a  $^{24}\text{Mg}(p,t)^{22}\text{Mg}$  measurement”  
**K.Y. Chae**, D.W. Bardayan, J.C. Blackmon, B.H. Moazen, K.A. Chipps, R. Hatarik, K.L. Jones, R.L. Kozub, J.F. Liang, C.D. Nesaraja, P.D. O’Malley, C. Matei, S.D. Pain, S.T. Pittman, M.S. Smith  
The April Meeting 2009 of the American Physical Society,  
Denver, Colorado, USA, May 2 - 5, 2009.

# KYUNGYUK CHAE

---

- “Searching for resonances in the unbound  ${}^6\text{Be}$  nucleus”  
**K.Y. Chae**, D.W. Bardayan, J.C. Blackmon, J.J. Das, M.W. Guidry, V. Guimarães, K.L. Jones, M.S. Johnson, R.L. Kozub, R.J. Livesay, Z. Ma, C.D. Nesaraja, S.D. Pain, M.S. Smith, J.S. Thomas, D.W. Visser  
20th International Conference on the Application of Accelerators in Research and Industry,  
Fort Worth, Texas, USA, August 10 - 15, 2008.
- “Spin assignments of  ${}^{22}\text{Mg}$  through a  ${}^{24}\text{Mg}(p,t){}^{22}\text{Mg}$  measurement”  
**K.Y. Chae**, D.W. Bardayan, J.C. Blackmon, B.H. Moazen, K. Chipps, R. Hatarik, K.L. Jones, R.L. Kozub, J.F. Liang, C.D. Nesaraja, P.D. O’Malley, C. Matei, S.D. Pain, S.T. Pittman, M.S. Smith  
Nuclei in the Cosmos X,  
Mackinac Island, Michigan, USA, July 27 - August 1, 2008.
- “Spin assignments of  ${}^{22}\text{Mg}$  through  ${}^{24}\text{Mg}(p,t){}^{22}\text{Mg}$  reaction measurement”  
**K.Y. Chae**, D.W. Bardayan, J.C. Blackmon, B.H. Moazen, K.A. Chipps, R. Hatarik, K.L. Jones, R.L. Kozub, J.F. Liang, C.D. Nesaraja, P.D. O’Malley, C. Matei, S.D. Pain, S.T. Pittman, M.S. Smith  
The April Meeting 2008 of the American Physical Society,  
St. Louis, Missouri, USA, April 12 - 15, 2008.
- “Searching for resonances in the unbound  ${}^6\text{Be}$  nucleus”  
**K.Y. Chae**, D.W. Bardayan, J.C. Blackmon, J.J. Das, M.W. Guidry, V. Guimarães, K.L. Jones, M.S. Johnson, R.L. Kozub, R.J. Livesay, Z. Ma, C.D. Nesaraja, S.D. Pain, M.S. Smith, J.S. Thomas, D.W. Visser  
The Annual Meeting of the Division of Nuclear Physics of the American Physics Society,  
Newport News, Virginia, USA, October 10 - 13, 2007.
- “Searching for resonances in the unbound  ${}^6\text{Be}$  nucleus”  
**K.Y. Chae**, D.W. Bardayan, J.C. Blackmon, J.J. Das, M.W. Guidry, V. Guimarães, K.L. Jones, M.S. Johnson, R.L. Kozub, R.J. Livesay, Z. Ma, C.D. Nesaraja, S.D. Pain, M.S. Smith, J.S. Thomas, D.W. Visser  
Frontiers 2007,  
University of Notre Dame, Indiana, USA, August 19 - 21, 2007.
- “Searching for resonances in the unbound  ${}^6\text{Be}$  nucleus”  
**K.Y. Chae**, D.W. Bardayan, J.C. Blackmon, J.J. Das, M.W. Guidry, V. Guimarães, K.L. Jones, M.S. Johnson, R.L. Kozub, R.J. Livesay, Z. Ma, C.D. Nesaraja, S.D. Pain, M.S. Smith, J.S. Thomas, D.W. Visser  
Stewardship Science Academic Alliance 2007 Program Symposium,  
Washington DC, USA, February 5 - 7, 2007.
- “First experimental constraints on the interference of  $3/2^+$  resonances in the  ${}^{18}\text{F}(p,\alpha){}^{15}\text{O}$  reaction”  
**K.Y. Chae**, D.W. Bardayan, J.C. Blackmon, D. Gregory, M.W. Guidry, M.S. Johnson, R.L. Kozub, R.J. Livesay, Z. Ma, C.D. Nesaraja, S.D. Pain, S. Paulaskas, M. Porter-Peden, J.F. Shriner Jr., N. Smith, M.S. Smith, J.S. Thomas  
The Annual Meeting of the Division of Nuclear Physics of the American Physics Society,  
Nashville, Tennessee, USA, October 25 - 28, 2006.
- “First experimental constraints on the interference of  $3/2^+$  resonances in the  ${}^{18}\text{F}(p,\alpha){}^{15}\text{O}$  reaction”  
**K.Y. Chae**, D.W. Bardayan, J.C. Blackmon, D. Gregory, M.W. Guidry, M.S. Johnson, R.L. Kozub, R.J. Livesay, Z. Ma, C.D. Nesaraja, S.D. Pain, S. Paulaskas, M. Porter-Peden, J.F. Shriner Jr., N. Smith, M.S. Smith, J.S. Thomas  
HRIBF workshop on nuclear measurements for astrophysics,  
Oak Ridge, Tennessee, USA, October 23 - 24, 2006
- “First experimental constraints on the interference of  $3/2^+$  resonances in the  ${}^{18}\text{F}(p,\alpha){}^{15}\text{O}$  reaction”  
**K.Y. Chae**, D.W. Bardayan, J.C. Blackmon, D. Gregory, M.W. Guidry, M.S. Johnson, R.L. Kozub, R.J. Livesay, Z. Ma, C.D. Nesaraja, S.D. Pain, S. Paulaskas, M. Porter-Peden, J.F. Shriner Jr., N. Smith, M.S. Smith, J.S. Thomas

# KYUNGYUK CHAE

---

Nuclei in the Cosmos IX,  
Geneva, Switzerland, June 25 - 30, 2006.

- “Java 3D Interactive Visualization for Astrophysics”  
**K.Y. Chae**, D. Edirisinghe, E.J. Lingerfelt, M.W. Guidry  
American Astronomical Society 202nd meeting,  
Nashville, Tennessee, USA, May 25 - 29, 2003.

# KYUNGYUK CHAE

---

## PUBLICATIONS - SCI(E)

- “Investigation of Compton Scattering for GAMMA Beam Intensity Measurements and Perspectives at ELI-NP”  
G.V. Turturica, C. Matei, A. Pappalardo, D.L. Balabanski, S. Chesnevskaya, V. Iancu, C.A. Ur, H.J. Karwowski, K.A. Chipps, M.T. Febraro, S.D. Pain, D. Walter, C. Aa. Diget, J. Frost-Schenk, M.K. Munch, G.L. Guardo, M. La Cognata, R.G. Pizzone, G.G. Rapisarda, **K.Y. Chae**, M. Kim, M. Kwag  
submitted to Nucl. Instrum. Methods A (2018)
- “MITA: A Multilayer Ionization-chamber Telescope Array for Low-energy Reactions with Exotic Nuclei”  
N.R. Ma, L. Yang, C.J. Lin, H. Yahaguchi, D.X. Wang, L.J. Sun, M. Mazzocco, H.M. Jia, S. Hayakawa, D. Kahl, S.M. Cha, G.X. Zhang, F. Yang, Y.Y. Yang, C. Signorini, Y. Sakaguchi, K. Abe, M. La Commara, D. Pierroutsakou, C. Parascandolo, E. Strano, A. Kim, **K.Y. Chae**, M.S. Kwag, G.L. Zhang, M. Pan, X.X. Xu, P.W. Wen, F.P. Zhong, H.H. Sun, G. Guo  
submitted to Nucl. Instrum. Methods A (2018)
- “Key  $^{19}\text{Ne}$  states identified affecting  $\gamma$ -ray emission from  $^{18}\text{F}$  in novae”  
M.R. Hall, D.W. Bardayan, T. Baugher, A. Lepailleur, S.D. Pain, A. Ratkiewicz, S. Ahn, J.M. Allen, J.T. Anderson, A.D. Ayangeakaa, J.C. Blackmon, S. Burcher, M.P. Carpenter, S.M. Cha, **K.Y. Chae**, K.A. Chipps, J.A. Cizewski, M. Febraro, O. Hall, J. Hu, C.L. Jiang, K.L. Jones, E.J. Lee, P.D. O’Malley, S. Ota, B.C. Rasco, D. Santiago-Gonzales, D. Seweryniak, H. Sims, K. Smith, W.P. Tan, P. Thompson, C. Thornsberry, R.L. Varner, D. Walter, G.L. Wilson, S. Zhu  
submitted to Phys. Rev. Lett. (2018)
- “Spin assignments for  $^{23}\text{Mg}$  levels and the astrophysical  $^{22}\text{Na}(p,\gamma)^{23}\text{Mg}$  reaction”  
M.S. Kwag, **K.Y. Chae**, S. Ahn, D.W. Bardayan, K.A. Chipps, J.A. Cizewski, M.E. Howard, R.L. Kozub, K. Kwak, B. Manning, M. Matos, P.D. O’Malley, S.D. Pain, W.A. Peters, S.T. Pittman, A. Ratkiewicz, M.S. Smith, S. Strauss  
submitted to Phys. Rev. C (2018)
- “Informing Direct Neutron Capture on Tin Isotopes Near the  $N = 82$  Shell Closure”  
B. Manning, G. Arbanas, J.A. Cizewski, R.L. Kozub, S. Ahn, J.M. Allmond, D.W. Bardayan, **K.Y. Chae**, K.A. Chipps, M.E. Howard, K.L. Jones, J.F. Liang, M. Matos, C.D. Nesaraja, F.M. Nunes, P.D. O’Malley, S.D. Pain, W.A. Peters, S.T. Pittman, A. Ratkiewicz, K.T. Schmitt, D. Shapira, M.S. Smith, L. Titus  
submitted to Phys. Rev. C (2018)
- “Direct Neutron Capture Cross section on  $^{80}\text{Ge}$  and probing shape coexistence in neutron-rich nuclei”  
S. Ahn, D.W. Bardayan, K.L. Jones, A.S. Adekola, G. Arbanas, J.C. Blackmon, **K.Y. Chae**, K.A. Chipps, J.A. Cizewski, S. Hardy, M.E. Howard, R.L. Kozub, B. Manning, M. Matos, C.D. Nesaraja, P.D. O’Malley, S.D. Pain, W.A. Peters, S.T. Pittman, B.C. Rasco, M.S. Smith, I. Spassova  
submitted to Phys. Rev. Lett. (2018)
- “Heating factors of Gas Targets for Radioactive Ion Beam Production”  
N.N. Duy, **K.Y. Chae**, Vinh N.T. Pham, T.V. Nhan Hao  
accepted for publication in J. Radioanal. Nucl. Chem. (2018)
- “Study of  $\alpha$  cluster structure in  $^{22}\text{Mg}$  using radioactive ion beam”  
S.M. Cha, **K.Y. Chae**, M.J. Kim, M.S. Kwag, E.J. Lee, K. Abe, S. Hayakawa, H. Shimizu, H. Yamaguchi, L. Yang, S.H. Bae, S.H. Choi, D.N. Binh, N.N. Duy, Z. Ge, V.H. Phong, K.I. Hahn, B. Hong, B. Moon, N. Iwasa, D. Kahl, L.H. Khiem, A. Kim, D.H. Kim, G.W. Kim, S.I. Lim, S.Y. Park, E.J. Kim, K. Kwak, J.Y. Moon  
accepted for publication in J. Korean Phys. Soc. (2018)

# KYUNGYUK CHAE

---

- “Study of the  ${}^2\text{H}({}^7\text{Be}, p+{}^3\text{He}+{}^4\text{He})n$  reaction for resonances in  ${}^8\text{B}$ ”  
**K.Y. Chae**, J.H. Lee  
accepted for publication in J. Korean Phys. Soc. (2018)
- “A Design and its Validation of a Proton Recoil Telescope with a Silicon Detector for Measurements of Fast Neutrons”  
C. Ham, V.R. Chavan, S.I. Bak, C. Shim, D. Moon, Y. Kim, **K.Y. Chae**, T.S. Park, S.W. Hong, H. Joo, H. Park  
J. Korean Phys. Soc. 73, 271 (2018)
- “Study of  ${}^{19}\text{F}$  levels with  $E_x = 6.7\text{-}7.7$  MeV by the  ${}^{15}\text{N}+\alpha$  scattering experiment”  
D. Kim, G.W. Kim, S.Y. Park, A. Kim, K.I. Hahn, K. Abe, O. Beliuskina, H. Yamaguchi, S. Hayakawa, N. Imai, N. Kitamura, Y. Sakaguchi, S.M. Cha, **K.Y. Chae**, M.S. Kwag, S.W. Hong, E.J. Lee, J.H. Lee, E.K. Lee, J.Y. Moon, S.H. Bae, S.H. Choi, S. Kubono, V. Panin, Y. Wakabayashi, N. Iwasa, D. Kahl, A.A. Chen  
J. Korean Phys. Soc. 73, 265 (2018)
- “Measuring low-energy ( $\alpha, p$ ) reaction cross sections using an extended gas target and gas recirculator”  
**K.Y. Chae**, S. Ahn, A. Ayres, D.W. Bardayan, A. Bey, U. Greife, M.E. Howard, K.L. Jones, R.L. Kozub, M. Matos, B.H. Moazen, C.D. Nesajara, P.D. O’Malley, W.A. Peters, S.T. Pittman, M.S. Smith  
Nucl. Instrum. Methods A 900, 60 (2018)
- “Beam Production of  ${}^{18}\text{Ne}$  with In-flight Method for Alpha Scattering at CRIB”  
N.N. Duy, **K.Y. Chae**, S.M. Cha, H. Yamaguchi, K. Abe, S.H. Bae, D.N. Binh, S.H. Choi, K.I. Hahn, S. Hayakawa, B. Hong, N. Iwasa, D. Kahl, L.H. Khiem, A. Kim, D.H. Kim, E.J. Kim, G.W. Kim, M.J. Kim, K. Kwag, M.S. Kwag, E.J. Lee, S.I. Lim, B. Moon, J.Y. Moon, S.Y. Park, V.H. Phong, H. Shimizu, L. Yang, Z. Ge, T.V. Nhan Hao  
Nucl. Instrum. Methods A 897, 8 (2018)
- “Measuring one nucleon transfer reaction  ${}^{24}\text{Mg}(p, d){}^{23}\text{Mg}$  for astrophysical reaction rates”  
E.J. Lee, **K.Y. Chae**  
J. Korean Phys. Soc. 71, 758 (2017)
- “Isomer Spectroscopy of Neutron-Rich  ${}^{168}\text{Tb}_{103}$ ”  
L.A. Gurgi, P.H. Regan, H. Watanabe, P.-A. Soderstrom, P.M. Walker, Zs. Podolyak, S. Nishimura, T.A. Berry, P. Doornenbal, G. Lorusso, T. Isobe, H. Baba, Z.Y. Xu, H. Sakurai, T. Sumikama, W.N. Catford, A.M. Bruce, F. Browne, G.J. Lane, F.G. Kondev, A. Odahara, J. Wu, H.L. Liu, F.R. Xu, Z. Korkulu, P. Lee, J.J. Liu, V.H. Phong, A. Yagi, G.X. Zhang, T. Alharbi, R.J. Carroll, **K.Y. Chae**, Zs. Dombradi, A. Estrade, N. Fukuda, C. Griffin, E. Ideguchi, N. Inabe, H. Kanaoka, I. Kojouharov, T. Kubo, S. Kubono, N. Kurz, I. Kuti, S. Lalkovski, E.J. Lee, C.S. Lee, G. Lotay, C.-B. Moon, I. Nishizuka, C.R. Nita, Z. Patel, O.J. Roberts, H. Schaffner, C.M. Shand, H. Suzuki, H. Takeda, S. Terashima, Zs. Vajta, S. Yoshidal, J.J. Valiente-Dobon  
Radiat. Phys. Chem. 140, 493 (2017)
- “Spectroscopic study of radionuclide  ${}^{21}\text{Na}$  for the astrophysical  ${}^{17}\text{F}(\alpha, p){}^{20}\text{Ne}$  reaction rate”  
S.M. Cha, **K.Y. Chae**, S. Ahn, D.W. Bardayan, K.A. Chipps, J.A. Cizewski, M.E. Howard, R.L. Kozub, K. Kwag, B. Manning, M. Matos, P.D. O’Malley, S.D. Pain, W.A. Peters, S.T. Pittman, A. Ratkiewicz, M.S. Smith, S. Strauss  
Phys. Rev. C 96, 025810 (2017)
- “Observation of a  $\gamma$ -decaying millisecond isomeric state in  ${}^{128}\text{Cd}_{80}$ ”  
A. Jungclaus, H. Grawe, S. Nishimura, P. Doornenbal, G. Lorusso, G.S. Simpson, P.-A. Soderstrom, T. Sumikama, J. Taprogge, Z.Y. Xu, H. Baba, F. Browne, N. Fukuda, R. Gernhauser, G. Gey, N. Inabe, T. Isobe, H.S. Jung, D. Kameda, G.D. Kim, Y.-K. Kim, I. Kojouharov, T. Kubo, N. Kurz, Y.K. Kwon, Z. Li, H. Sakurai, H. Schaffner, Y. Shimizu, K. Steiger, H. Suzuki, H. Takeda, Zs. Vajta, H. Watanabe, J. Wu, A. Yagi, K. Yoshinaga, G. Benzoni, S. Bonig, **K.Y. Chae**, L. Coraggio, J.-M. Daugas, F. Drouet, A. Gadea, A.

Gargano, S. Iliieva, N. Itaco, F.G. Kondev, T. Kroll, G.J. Lane, A. Montaner-Piza, K. Moschner, D. Mucher, F. Naqvi, M. Niikura, H. Nishibata, A. Odahara, R. Orlandi, Z. Patel, Zs. Podolyak, A. Wendt  
Phys. Lett. B 722, 483 (2017)

- “Multi-Electrode Ionization Chamber Energy Loss Calculator (MICE)”  
M.J. Kim, **K.Y. Chae**  
J. Korean Phys. Soc. 70, 912 (2017)
- “Isomer Spectroscopy of Neutron-Rich  $^{165,167}\text{Tb}$ ”  
L.A. Gurgi, P.H. Regan, H. Watanabe, P.-A. Soderstrom, H. Watanabe, P.M. Walker, Zs. Podolyak, S. Nishimura, T.A. Berry, P. Doornenbal, G. Lorusso, T. Isobe, H. Baba, Z.Y. Xu, H. Sakurai, T. Sumikama, W.N. Catford, A.M. Bruce, F. Browne, G.J. Lane, F.G. Kondev, A. Odahara, J. Wu, H.L. Liu, F.R. Xu, Z. Korkulu, P. Lee, J.J. Liu, V.H. Phong, A. Yagi, G.X. Zhang, T. Alharbi, R.J. Carroll, **K.Y. Chae**, Zs. Dombradi, A. Estrade, N. Fukuda, C. Griffin, E. Ideguchi, N. Inabe, H. Kanaoka, I. Kojouharov, T. Kubo, S. Kubono, N. Kurz, I. Kuti, S. Lalkovski, E.J. Lee, C.S. Lee, G. Lotay, C.-B. Moon, I. Nishizuka, C.R. Nita, Z. Patel, O.J. Roberts, H. Schaffner, C.M. Shand, H. Suzuki, H. Takeda, S. Terashima, Zs. Vajta, S. Kanaya, J.J. Valiente-Dobon  
Acta Physica Polonica B 48, 601 (2017)
- “First spin-parity constraint of the 306 keV resonance in  $^{35}\text{Cl}$  for nova nucleosynthesis”  
K.A. Chipps, S.D. Pain, R.L. Kozub, D.W. Bardayan, J.A. Cizewski, **K.Y. Chae**, J.F. Liang, C. Matei, B.H. Moazen, C.D. Nesaraja, P.D. O’Malley, W.A. Peters, S.T. Pittman, K.T. Schmitt, M.S. Smith  
Phys. Rev. C 95, 045808 (2017)
- “92  $\beta$ -Decay Half-lives of Neutron-Rich  $^{55}\text{Cs}$  to  $^{67}\text{Ho}$ : Experimental Feedback and Evaluation of the  $r$ -Process Rare-Earth Peak Formation”  
J. Wu, S. Nishimura, G. Lorusso, P. Moller, E. Ideguchi, P.-H. Regan, H. Sakurai, G.S. Simpson, P.-A. Soderstrom, P. Walker, H. Watanabe, Z.Y. Xu, Y.L. Ye, H. Baba, F. Browne, R. Daido, P. Doornenbal, Y.F. Fang, G. Gey, T. Isobe, J.J. Liu, P.S. Lee, Z. Li, Z. Korkulu, Z. Patel, S. Rice, L. Sinclair, T. Sumikama, M. Tanaka, V. Phong, A. Yagi, R. Yokoyama, G.X. Zhang, N. Aoi, T. Alharbi, F.L. Bello Garrote, G. Benzoni, A.M. Bruce, R.J. Carroll, **K.Y. Chae**, Z. Dombradi, A. Estrade, A. Gottardo, C. Griffin, H. Kanaoka, I. Kojouharov, F.G. Kondev, S. Kubono, I. Kuti, N. Kurz, S. Lalkovski, G.J. Lane, E.J. Lee, T. Lokotko, G. Lotay, C.-B. Moon, H. Nishibata, I. Nishizuka, C. Nita, A. Odahara, Z. Podolyak, O.J. Roberts, C. Shand, H. Schaffner, S. Terashima, J. Taprogge, Z. Vajta, S. Yoshida  
Phys. Rev. Lett. 118, 072701 (2017)
- “Experimental investigation of linear-chain structured nucleus in  $^{14}\text{C}$ ”  
H. Yamaguchi, D. Kahl, S. Hayakawa, Y. Sakaguchi, K. Abe, T. Nakao, T. Suhara, N. Iwasa, A. Kim, D.H. Kim, S.M. Cha, M.S. Kwag, J.H. Lee, E.J. Lee, **K.Y. Chae**, Y. Wakabayashi, N. Imai, N. Kitamura, P. Lee, J.Y. Moon, K.B. Lee, C. Akers, H.S. Jung, N.N. Duy, L.H. Khiem, C.S. Lee  
Phys. Lett. B 766, 11(2017)
- “Proton-hole and core-excited states in the semi-magic nucleus  $^{131}\text{In}_{82}$ ”  
J. Taprogge, A. Jungclaus, S. Nishimura, I.N. Borzov, P. Doornenbal, H. Grawe, G. Lorusso, G.S. Simpson, P.-A. Soderstrom, T. Sumikama, Z.Y. Xu, H. Baba, F. Browne, N. Fukuda, R. Gernhauser, G. Gey, N. Inabe, T. Isobe, H.S. Jung, D. Kameda, G.D. Kim, Y.-K. Kim, I. Kojouharov, T. Kubo, N. Kurz, Y.K. Kwon, Z. Li, H. Sakurai, H. Schaffner, K. Steiger, H. Suzuki, H. Takeda, Zs. Vajta, H. Watanabe, J. Wu, A. Yagi, K. Yoshinaga, G. Benzoni, S. Bonig, **K.Y. Chae**, L. Coraggio, J.-M. Daugas, F. Drouet, A. Gadea, A. Gargano, S. Iliieva, N. Itaco, F.G. Kondev, T. Kroll, G.J. Lane, A. Montaner-Piza, K. Moschner, D. Mucher, F. Naqvi, M. Niikura, H. Nishibata, A. Odahara, R. Orlandi, Z. Patel, Zs. Podolyak, A. Wendt  
Eur. Phys. A 52, 347 (2016)

- “*K*-mixing in the doubly mid-shell nuclide  $^{170}\text{Dy}$  and the role of vibrational degeneracy”  
P.-A. Söderström, P.M. Walker, J. Wu, H.L. Liu, P.H. Regan, H. Watanabe, F.R. Xu, P. Doornenbal, Z. Korkulu, P. Lee, J.J. Liu, G. Lorusso, S. Nishimura, P.H. Vi, T. Sumikama, A. Yagi, G.X. Zhang, T. Alharbi, H. Baba, F. Browne, A.M. Bruce, R. Carroll, **K.Y. Chae**, Zs. Dombradi, A. Estrade, N. Fukuda, C. Griffin, E. Ideguchi, N. Inabe, T. Isobe, H. Kanaoka, I. Kojouharov, F.G. Kondev, T. Kubo, S. Kubono, N. Kurz, I. Kuti, S. Lalkovski, G.J. Lane, E.J. Lee, C.S. Lee, G. Lotay, C.-B. Moon, I. Nishizuka, C.R. Nita, A. Odahara, Z. Patel, Zs. Podolyak, O.J. Roberts, H. Sakurai, H. Schaffner, C.M. Shand, H. Suzuki, H. Takeda, S. Terashima, Zs. Vajta, J.J. Valiente-Dobon, Z.Y. Xu, S. Yoshida  
Phys. Lett. B 762, 404 (2016)
- “The  $\beta$  decay of semi-magic  $^{130}\text{Cd}$ : Revision and extension of the level scheme of  $^{130}\text{In}$ ”  
A. Jungclaus, H. Grawe, S. Nishimura, P. Doornenbal, G. Lorusso, G.S. Simpson, P.-A. Soderstrom, T. Sumikama, J. Taprogge, Z.Y. Xu, H. Baba, F. Browne, N. Fukuda, R. Gernhauser, G. Gey, N. Inabe, T. Isobe, H.S. Jung, D. Kameda, G.D. Kim, Y.-K. Kim, I. Kojouharov, T. Kubo, N. Kurz, Y.K. Kwon, Z. Li, H. Sakurai, H. Schaffner, Y. Shimizu, K. Steiger, H. Suzuki, H. Takeda, Zs. Vajta, H. Watanabe, J. Wu, A. Yagi, K. Yoshinaga, G. Benzoni, S. Bonig, **K.Y. Chae**, L. Coraggio, J.-M. Daugas, F. Drouet, A. Gadea, A. Gargano, S. Ilieva, N. Itaco, F.G. Kondev, T. Kroll, G.J. Lane, A. Montaner-Piza, K. Moschner, D. Mucher, F. Naqvi, M. Niikura, H. Nishibata, A. Odahara, R. Orlandi, Z. Patel, Zs. Podolyak, A. Wendt  
Phys. Rev. C 94, 024303 (2016)
- “Long-lived *K* isomer and enhanced  $\gamma$  vibration in the neutron-rich nucleus  $^{172}\text{Dy}$ : Collectivity beyond double midshell”  
H. Watanabe, G.X. Zhang, K. Yoshida, P.M. Walker, J.J. Liu, J. Wu, P.H. Regan, P.-A. Soderstrom, H. Kanaoka, Z. Korkulu, P.S. Lee, S. Nishimura, A. Yagi, D.S. Ahn, T. Alharbi, H. Baba, F. Browne, A.M. Bruce, R.J. Carroll, **K.Y. Chae**, Zs. Dombradi, P. Doornenbal, A. Estrade, N. Fukuda, C. Griffin, E. Ideguchi, N. Inabe, T. Isobe, S. Kanaya, I. Kojouharov, F.G. Kondev, T. Kubo, S. Kubono, N. Kurz, I. Kuti, S. Lalkovski, G.J. Lane, C.S. Lee, E.J. Lee, G. Lorusso, G. Lotay, C.-B. Moon, I. Nishizuka, C.R. Nita, A. Odahara, Z. Patel, V.H. Phong, Zs. Podolyak, O.J. Roberts, H. Sakurai, H. Schaffner, C.M. Shand, Y. Shimizu, T. Sumikama, H. Suzuki, H. Takeda, S. Terashima, Zs. Vajta, J.J. Valiente-Dobon, Z.Y. Xu  
Phys. Lett. B 760, 641 (2016)
- “Construction and Commissioning of a Position-Sensitive Ionization Chamber”  
M.S. Kwag, **K.Y. Chae**, S.M. Cha, A. Kim, M.J. Kim, E.J. Lee, J.H. Lee  
J. Korean Phys. Soc. **68**, 1165 (2016)
- “Visualized Kinematics Code for Two-Body Nuclear Reactions”  
E.J. Lee, **K.Y. Chae**  
J. Korean Phys. Soc. **68**, 1055 (2016)
- “Structure of  $^{107}\text{Sn}$  studied through single-neutron knockout reactions”  
G. Cerizza, A. Ayres, K.L. Jones, R. Grzywacz, A. Bey, C. Bingham, L. Cartegni, D. Miller, S. Padgett, T. Baugher, D. Bazin, J.S. Berryman, A. Gade, S. McDaniel, A. Ratkiewicz, A. Shore, S.R. Stroberg, D. Weisshaar, K. Wimmer, R. Winkler, S.D. Pain, **K.Y. Chae**, J.A. Cizewski, M.E. Howard, J.A. Tostevin  
Phys. Rev. C **93**, 021601 (2016)
- “Background Considerations for the  $^2\text{H}(^7\text{Be}, ^3\text{H})^6\text{Be}$  Experimental Data II: Three-Body Continuum”  
**K.Y. Chae**, V. Guimarães  
J. Korean Phys. Soc. **67**, 1533 (2015)
- “ $^{24}\text{Mg}(p,d)^{21}\text{Na}$  reaction study for spectroscopy of  $^{21}\text{Na}$ ”  
S.M. Cha, **K.Y. Chae**, A. Kim, E.J. Lee, S. Ahn, D.W. Bardayan, K.A. Chipps, J.A. Cizewski, M.E. Howard, B. Manning, P.D. O’Malley, A. Ratkiewicz, S. Strauss, R.L. Kozub, M. Matos, S.D. Pain, S.T. Pittman, M.S.

Smith, W.A. Peters

J. Korean Phys. Soc. **67**, 1435 (2015)

- “Recent direct reaction experimental studies with heavy-mass radioactive ion beams”  
K.L. Jones, S.H. Ahn, J.M. Allmond, A. Ayres, D.W. Bardayan, T. Baugher, D. Bazin, J. Berryman, A. Bey, C. Bingham, L. Cartegni, G. Cerizza, **K.Y. Chae**, J.A. Cizewski, A. Gade, A. Galindo-Urribari, R.F. Garcia-Ruiz, R. Grzywacz, M.E. Howard, R.L. Kozub, J.F. Liang, B.M. Manning, M. Matos, S. McDaniel, D. Miller, C.D. Nesaraja, P.D. O’Malley, S. Padgett, E. Padilla-Rodal, S.D. Pain, S.T. Pittman, D.C. Radford, A. Ratkiewicz, K.T. Schmitt, A. Shore, M.S. Smith, D.W. Stracener, S.R. Stroberg, J. Tostevin, R.L. Varner, D. Weisshaar, K. Wimmer, R. Winkler  
Acta Physica Polonica B **46**, 537 (2015)
- “ $\beta$  decay of  $^{129}\text{Cd}$  and excited states in  $^{129}\text{In}$ ”  
J. Taprogge, A. Jungclaus, H. Grawe, S. Nishimura, P. Doornenbal, G. Lorusso, G.S. Simpson, P.-A. Soderstrom, T. Sumikama, Z. Xu, H. Baba, F. Browne, N. Fukuda, R. Gernhauser, G. Gey, N. Inabe, T. Isobe, H.S. Jung, D. Kameda, G.D. Kim, Y.-K. Kim, I. Kojouharouf, T. Kubo, N. Kurz, Y.K. Kwon, Z. Li, H. Sakurai, H. Schaffner, K. Steiger, H. Suzuki, H. Takeda, Zs. Vajta, H. Watanabe, J. Wu, A. Yagi, K. Yoshinaga, G. Benzoni, S. Bonig, **K.Y. Chae**, L. Coraggio, A. Covello, J.-M. Daugas, F. Drouet, A. Gadea, A. Gargano, S. Ilieva, F.G. Kondev, T. Kroll, G.J. Lane, A. Montaner-Piza, K. Moschner, D. Mucher, F. Naqvi, M. Niikura, H. Nishibata, A. Odahara, R. Orlandi, Z. Patel, Zs. Podolyak, A. Wendt  
Phys. Rev. C **91**, 054324 (2015)
- “Constraint of the astrophysical  $^{26}\text{Al}(p,\gamma)^{27}\text{Si}$  destruction rate at stellar temperatures”  
S.D. Pain, D.W. Bardayan, J.C. Blackmon, S.M. Brown, **K.Y. Chae**, K.A. Chipps, J.A. Cizewski, K.L. Jones, R.L. Kozub, J.F. Liang, C. Matei, M. Matos, B.H. Moazen, C.D. Nesaraja, J. Okolowicz, P.D. O’Malley, W.A. Peters, S.T. Pittman, M. Ploszajczak, K.T. Schmitt, J.F. Shriner, Jr, D. Shapira, M.S. Smith, D.W. Stracener  
Phys. Rev. Lett. **114**, 212501 (2015)
- “ $\beta$ -Decay Half-lives of 110 Neutron-Rich Nuclei across the  $N = 82$  Shell Gap: Implications for the Mechanism and Universality of the Astrophysical  $r$ -process”  
G. Lorusso, S. Nishimura, Z.Y. Xu, A. Jungclaus, Y. Shimizu, G.S. Simpson, P.-A. Soderstrom, H. Watanabe, F. Browne, P. Doornenbal, G. Gey, H.S. Jung, B. Meyer, T. Sumikama, J. Taprogge, Zs. Vajta, J. Wu, H. Baba, G. Benzoni, **K.Y. Chae**, F.C.L. Crespi, N. Fukuda, R. Gernhauser, N. Inabe, T. Isobe, T. Kajino, D. Kameda, G.D. Kim, Y.-K. Kim, I. Kojouharov, F.G. Kondev, T. Kubo, N. Kurz, Y.K. Kwon, G.J. Lane, Z. Li, A. Montaner-Piza, K. Moschner, F. Naqvi, M. Niikura, H. Nishibata, A. Odahara, R. Orlandi, Z. Patel, Zs. Podolyak, H. Sakurai, H. Schaffner, P. Schury, S. Shibagaki, K. Steiger, H. Suzuki, H. Takeda, A. Wendt, A. Yagi, K. Yoshinaga  
Phys. Rev. Lett. **114**, 192501 (2015)
- “Design Study for the KOBRA (Korea Broad acceptance Recoil spectrometer and Apparatus) at RAON”  
Juneseic Park, Young Kwan Kwon, Jun Young Moon, Tetsuro Komatsubara, Seigo Kato, Chang-Bum Moon, **Kyung Yuk Chae**, Shigeru Kubono  
J. Korean Phys. Soc. **66**, 509 (2015)
- “Development and Performance Test of Analysis Software for the CRIB Active Target”  
P. Lee, C.S. Lee, J.Y. Moon, **K.Y. Chae**, S.M. Cha, H. Yamaguchi, T. Nakao, D.M. Kahl, S. Kubono, S. Cherubini, S. Hayakawa, C. Signorini  
J. Korean Phys. Soc. **66**, 459 (2015)
- “Identification of millisecond isomeric state in  $^{129}\text{Cd}_{81}$  via the detection of conversion and Compton electrons”  
J. Taprogge, A. Jungclaus, H. Grawe, S. Nishimura, Z.Y. Xu, P. Doornenbal, G. Lorusso, E. Nacher, G.S.



# KYUNGYUK CHAE

---

Simpson, P.-A. Soderstrom, T. Sumikama, H. Baba, F. Browne, N. Fukuda, R. Gernhauser, G. Gey, N. Inabe, T. Isobe, H.S. Jung, D. Kameda, G.D. Kim, Y.-K. Kim, I. Kojouharov, T. Kubo, N. Kurz, Y.K. Kwon, Z. Li, H. Sakurai, H. Schaffner, K. Steiger, H. Suzuki, H. Takeda, Zs. Vajta, H. Watanabe, J. Wu, A. Yagi, K. Yoshinaga, G. Benzoni, S. Bonig, **K.Y. Chae**, L. Coraggio, A. Covello, J.-M. Daugas, F. Drouet, A. Gadea, A. Gargano, S. Ilieva, F.G. Kondev, T. Kroll, G.J. Lane, A. Montaner-Piza, K. Moschner, D. Mucher, F. Naqvi, M. Niikura, H. Nishibata, A. Odahara, R. Orlandi, Z. Patel, Zs. Podolyak, A. Wendt  
Phys. Lett. B **738**, 223 (2014)

- “Background considerations for the  $^2\text{H}(^7\text{Be}, ^3\text{H})^6\text{Be}$  experimental data using the phase space model”  
**K.Y. Chae**, V. Guimarães  
J. Korean Phys. Soc. **65**, 1356 (2014)
- “Monopole-Driven Shell Evolution below the Doubly Magic Nucleus  $^{132}\text{Sn}$  Explored with the Long-Lived Isomer in  $^{126}\text{Pd}$ ”  
H. Watanabe, G. Lorusso, S. Nishimura, Z.Y. Xu, T. Sumikama, P.-A. Soderstrom, P. Doormenbal, Z. Li, T. Otsuka, F. Browne, G. Gey, H.S. Jung, J. Taprogge, Zs. Vajta, J. Wu, A. Yagi, H. Baba, G. Benzoni, **K.Y. Chae**, F.C.L. Crespi, N. Fukuda, R. Gernhauser, N. Inabe, T. Isobe, A. Jungclaus, D. Kameda, G.D. Kim, Y.K. Kim, I. Kojouharov, F.G. Kondev, T. Kubo, N. Kurz, Y.K. Kwon, G.J. Lane, C.-B. Moon, A. Montaner-Piza, K. Moschner, F. Naqvi, M. Niikura, H. Nishibata, D. Nishimura, A. Odahara, R. Orlandi, Z. Patel, Zs. Podolyak, H. Sakurai, H. Schaffner, G.S. Simpson, K. Steiger, H. Suzuki, H. Takeda, A. Wendt, K. Yoshinaga  
Phys. Rev. Lett. **113**, 042502 (2014)
- **Editor’s Suggestion** “ $1p_{3/2}$  Proton-Hole State in  $^{132}\text{Sn}$  and the Shell Structure Along  $N=82$ ”  
J. Taprogge, A. Jungclaus, H. Grawe, S. Nishimura, P. Doornenbal, G. Lorusso, G.S. Simpson, P.-A. Soderstrom, T. Sumikama, Z. Xu, H. Baba, F. Browne, N. Fukuda, R. Gernhauser, G. Gey, N. Inabe, T. Isobe, H.S. Jung, D. Kameda, G.D. Kim, Y.-K. Kim, I. Kojouharov, T. Kubo, N. Kurz, Y.K. Kwon, Z. Li, H. Sakurai, H. Schaffner, K. Steiger, H. Suzuki, H. Takeda, Z. Vajta, H. Watanabe, J. Wu, A. Yagi, K. Yoshinaga, G. Benzoni, S. Bonig, **K.Y. Chae**, L. Coraggio, A. Covello, J.-M. Daugas, F. Drouet, A. Gadea, A. Gargano, S. Ilieva, F.G. Kondev, T. Kroll, G.J. Lane, A. Montaner-Piza, K. Moschner, D. Mucher, F. Naqvi, M. Niikura, H. Nishibata, A. Odahara, R. Orlandi, Z. Patel, Zs. Podolyak, A. Wendt  
Phys. Rev. Lett. **112**, 132501 (2014)
- “Construction of a fast ionization chamber for high-rate particle identification”  
**K.Y. Chae**, S. Ahn, D.W. Bardayan, K.A. Chipps, B. Manning, S.D. Pain, W.A. Peters, K.T. Schmitt, M.S. Smith, S. Strauss  
Nucl. Instrum. Methods A **751**, 6 (2014)
- “Development of a portable gas-filled ionization chamber”  
**K.Y. Chae**, S.M. Cha, M.S. Gwak  
J. Korean Phys. Soc. **64**, 516 (2014)
- “Reactions of a  $^{10}\text{Be}$  beam on proton and deuteron targets”  
K.T. Schmitt, K.L. Jones, S.H. Ahn, D.W. Bardayan, A. Bey, J.C. Blackmon, S.M. Brown, **K.Y. Chae**, K.A. Chipps, J.A. Cizewski, K.I. Hahn, J.J. Kolata, R.L. Kozub, J.F. Liang, C. Matei, M. Matos, D. Matyas, B. Moazen, C. Nesaraja, F.M. Nunes, P.D. O’Malley, S.D. Pain, W.A. Peters, S.T. Pittman, A. Roberts, D. Shapira, J.F. Shriner Jr., M.S. Smith, I. Spassova, D.W. Stracener, N.J. Upadhyay, A.N. Villano, G.L. Wilson  
Phys. Rev. C **88**, 064612 (2013)
- “Isomers in  $^{126}\text{Pd}$  and  $^{128}\text{Pd}$ : Evidence for a Robust Shell Closure at the Neutron Magic Number 82 in Exotic Palladium Isotopes”  
H. Watanabe, G. Lorusso, S. Nishimura, Z.Y. Xu, T. Sumikama, P.-A. Söderström, P. Doornenbal, F. Browne,

- G. Gey, H.S. Jung, J. Taprogge, Zs. Vajta, J. Wu, A. Yagi, H. Baba, G. Benzoni, **K.Y. Chae**, F.C.L. Crespi, N. Fukuda, R. Gernhäuser, N. Inabe, T. Isobe, A. Jungclaus, D. Kameda, I. Kojouharov, F.G. Kondev, T. Kubo, N. Kurz, Y.K. Kwon, G.J. Lane, Z. Li, C.-B. Moon, A. Montaner-Piza, K. Moschner, F. Naqvi, M. Niikura, H. Nishibata, D. Nishimura, A. Odahara, R. Orlandi, Z. Patel, Zs. Podolyak, H. Sakurai, H. Schaffner, G.S. Simpson, K. Steiger, H. Suzuki, H. Takeda, K. Yoshinaga  
Phys. Rev. Lett. **111**, 152501 (2013)
- “Shape evolution in  $^{116,118}\text{Ru}$ : Triaxiality and transition between the O(6)-U(5) dynamical symmetries”  
P.-A. Söderström, G. Lorusso, H. Watanabe, S. Nishimura, P. Doornenbal, G. Thiamova, F. Browne, G. Gey, H.S. Jung, T. Sumikama, J. Taprogge, Zs. Vajta, J. Wu, Z.Y. Xu, H. Baba, G. Benzoni, **K.Y. Chae**, F.C.L. Crespi, R. Gernhäuser, T. Isobe, A. Jungclaus, G.D. Kim, Y.-K. Kim, I. Kojouharov, F.G. Kondev, N. Kurz, Y.K. Kwon, G. Lane, Z. Li, A. Montaner-Piza, K. Moschner, F. Naqvi, M. Niikura, H. Nishibata, A. Odahara, R. Orlandi, Z. Patel, Zs. Podolyak, H. Sakurai, H. Schaffner, G. Simpson, K. Steiger, A. Wendt, A. Yagi, K. Yoshinaga  
Phys. Rev. C **88**, 024301 (2013)
  - “Construction and commissioning of the SuperORRUBA Detector”  
D.W. Bardayan, S. Ahn, J.C. Blackmon, **K.Y. Chae**, J.A. Cizewski, J. Elson, S. Hardy, L. Linhardt, B. Manning, M. Matos, S.D. Pain, L.G. Sobotka, M.S. Smith  
Nucl. Instrum. Methods A **711**, 160 (2013)
  - “Searching for Resonances in the Unbound  $^6\text{Be}$  Nucleus by Using a Radioactive  $^7\text{Be}$  Beam”  
**K.Y. Chae**, D.W. Bardayan, J.C. Blackmon, A.E. Champagne, J.J. Das, R.P. Fitzgerald, V. Guimarães, K.L. Jones, M.S. Johnson, R.L. Kozub, R.J. Livesay, Z. Ma, C.D. Nesaraja, S.D. Pain, M.S. Smith, J.S. Thomas, D.W. Visser  
J. Korean Phys. Soc. **61**, 1786 (2012)
  - “Neutron single particle structure in  $^{131}\text{Sn}$  and direct neutron capture cross sections”  
R.L. Kozub, G. Arbanas, A.S. Adekola, D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, K.A. Chipps, J.A. Cizewski, L. Erikson, R. Hatarik, W.R. Hix, K.L. Jones, W. Krolas, J.F. Liang, Z. Ma, C. Matei, B.H. Moazen, C.D. Nesaraja, S.D. Pain, D. Shapira, J.F. Shriner, Jr., M.S. Smith, T.P. Swan  
Phys. Rev. Lett. **109**, 172501 (2012)
  - “ $^{28}\text{Si}(p, ^3\text{He})$  Reaction for Spectroscopy of  $^{26}\text{Al}$ ”  
K.A. Chipps, D.W. Bardayan, **K.Y. Chae**, J.A. Cizewski, R.L. Kozub, C. Matei, B.H. Moazen, C.D. Nesaraja, P.D. O’Malley, S.D. Pain, W.A. Peters, S.T. Pittman, K.T. Schmitt, M.S. Smith  
Phys. Rev. C **86**, 014329 (2012)
  - “ $^{26}\text{Al}+p$  elastic and inelastic scattering reactions and Galactic abundances of  $^{26}\text{Al}$ ”  
S.T. Pittman, D.W. Bardayan, **K.Y. Chae**, K.A. Chipps, K.L. Jones, R.L. Kozub, C. Matei, M. Matos, B.H. Moazen, C.D. Nesaraja, P.D. O’Malley, S.D. Pain, P.D. Parker, W.A. Peters, J.F. Shriner, Jr., M.S. Smith  
Phys. Rev. C **85**, 065804 (2012)
  - “Halo nucleus  $^{11}\text{Be}$ : a spectroscopic study via neutron transfer”  
K.T. Schmitt, K.L. Jones, A. Bey, S.H. Ahn, D.W. Bardayan, J.C. Blackmon, S.M. Brown, **K.Y. Chae**, K.A. Chipps, J.A. Cizewski, K.I. Hahn, J.J. Kolata, R.L. Kozub, J.F. Liang, C. Matei, M. Matos, D. Matyas, B. Moazen, C. Nesaraja, F.M. Nunes, P.D. O’Malley, S.D. Pain, W.A. Peters, S.T. Pittman, A. Roberts, D. Shapira, J.F. Shriner Jr., M.S. Smith, I. Spassova, D.W. Stracener, A.N. Villano, G. Wilson  
Phys. Rev. Lett. **108**, 192701 (2012)
  - “ $^{19}\text{Ne}$  levels studied with the  $^{18}\text{F}(d, n)^{19}\text{Ne}^*(^{18}\text{F}+p)$  reaction”  
A.S. Adekola, C.R. Brune, D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, J.A. Cizewski, K.L. Jones, R.L. Kozub, T.N. Massey, C.D. Nesaraja, S.D. Pain, J.F. Shriner, Jr., M.S. Smith, J.S. Thomas  
Phys. Rev. C **85**, 037601 (2012)

# KYUNGYUK CHAE

---

- “Single-nucleon transfer reactions on  $^{18}\text{F}$ ”  
A.S. Adekola, D.W. Bardayan, J.C. Blackmon, C.R. Brune, **K.Y. Chae**, A.E. Champagne, C. Domizioli, U. Greife, Z. Heinen, M.J. Hornish, M. Johnson, K.L. Jones, R.L. Kozub, R.J. Livesay, Z. Ma, T.N. Massey, B. Moazen, C.D. Nesaraja, S.D. Pain, J.F. Shriner, Jr., N.D. Smith, M.S. Smith, J.S. Thomas, D.W. Visser, A.V. Voinov  
Phys. Rev. C **84**, 054611 (2011)
- “Comment on “Properties of  $^{26}\text{Mg}$  and  $^{26}\text{Si}$  in the  $sd$  shell model and the determination of the  $^{25}\text{Al}(p,\gamma)^{26}\text{Si}$  reaction rate””  
K.A. Chipps, D.W. Bardayan, **K.Y. Chae**, J.A. Cizewski, R.L. Kozub, J.F. Liang, C. Matei, P.D. O’Malley, S.D. Pain, W.A. Peters, S.T. Pittman, M.S. Smith  
Phys. Rev. C **84**, 059801 (2011)
- “Search for a resonant enhancement of the  $^7\text{Be}+d$  reaction and primordial  $^7\text{Li}$  abundances”  
P.D. O’Malley, D.W. Bardayan, A.S. Adekola, S. Ahn, **K.Y. Chae**, J.A. Cizewski, S. Graves, M.E. Howard, K.L. Jones, R.L. Kozub, L. Lindgardt, M. Matos, B.H. Moazen, C.D. Nesaraja, S.D. Pain, W.A. Peters, S.T. Pittman, K.T. Schmitt, J.F. Shriner, Jr., M.S. Smith, I. Spassova, S.Y. Strauss, J.L. Wheeler  
Phys. Rev. C **84**, 042801(R) (2011)
- “Direct reaction measurements with a  $^{132}\text{Sn}$  radioactive ion beam”  
K.L. Jones, F.M. Nunes, A.S. Adekola, D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, K.A. Chipps, J.A. Cizewski, L. Erikson, C. Harlin, R. Hatarik, R. Kapler, R.L. Kozub, J.F. Liang, R. Livesay, Z. Ma, B. Moazen, C.D. Nesaraja, S.D. Pain, N.P. Patterson, D. Shapira, J.F. Shriner Jr., M.S. Smith, T.P. Swan, J.S. Thomas  
Phys. Rev. C **84**, 034601 (2011)
- “First proton-transfer study of  $^{18}\text{F}+p$  resonances relevant for novae”  
A.S. Adekola, D.W. Bardayan, J.C. Blackmon, C.R. Brune, **K.Y. Chae**, A.E. Champagne, C. Domizioli, U. Greife, Z. Heinen, M.J. Hornish, M. Johnson, K.L. Jones, R.L. Kozub, R.J. Livesay, Z. Ma, T.N. Massey, B. Moazen, C.D. Nesaraja, S.D. Pain, J.F. Shriner, Jr., N.D. Smith, M.S. Smith, J.S. Thomas, D.W. Visser, A.V. Voinov  
Phys. Rev. C **83**, 052801(R) (2011)
- “Direct Studies of Low-Energy Resonances in  $^{31}\text{P}(p,\alpha)^{28}\text{Si}$  and  $^{35}\text{Cl}(p,\alpha)^{32}\text{S}$ ”  
B.H. Moazen, C. Matei, D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, K.A. Chipps, R. Hatarik, K.L. Jones, R.L. Kozub, M. Matos, C.D. Nesaraja, P.D. O’Malley, S.D. Pain, T. Pelham, S.T. Pittman, M.S. Smith  
Eur. Phys. J. A **47**, 66 (2011)
- “Neutron spectroscopic factors of  $^{34}\text{Ar}$  and  $^{46}\text{Ar}$  from  $(p,d)$  transfer reactions”  
Jenny Lee, M.B. Tsang, D. Bazin, D. Coupland, V. Henzl, D. Henzlova, M. Kilburn, W.G. Lynch, A.M. Rogers, A. Sanetullaev, Z.Y. Sun, M. Youngs, R.J. Charity, L.G. Sobotka, M. Famiano, S. Hudan, D. Shapira, P. O’Malley, W.A. Peters, **K.Y. Chae**, and K. Schmitt  
Phys. Rev. C **83**, 014606 (2011)
- “Spin assignments to excited states in  $^{22}\text{Na}$  through a  $^{24}\text{Mg}(p,^3\text{He})^{22}\text{Na}$  measurement”  
**K.Y. Chae**, D.W. Bardayan, J.C. Blackmon, K.A. Chipps, R. Hatarik, K.L. Jones, R.L. Kozub, J.F. Liang, C. Matei, B.H. Moazen, C.D. Nesaraja, P.D. O’Malley, S.D. Pain, S.T. Pittman, M.S. Smith  
Phys. Rev. C **82**, 047302 (2010)
- “The  $^{28}\text{Si}(p,t)^{26}\text{Si}^*(p)$  Reaction and the Rate of  $^{25}\text{Al}(p,\gamma)^{26}\text{Si}$ ”  
K.A. Chipps, D.W. Bardayan, **K.Y. Chae**, J.A. Cizewski, R.L. Kozub, J.F. Liang, C. Matei, B.H. Moazen, C.D. Nesaraja, P.D. O’Malley, S.D. Pain, W.A. Peters, S.T. Pittman, K.T. Schmitt, M.S. Smith  
Phys. Rev. C **82**, 045803 (2010)

# KYUNGYUK CHAE

---

- “Inelastic  $^{17}\text{F}(p,p)^{17}\text{F}$  scattering at  $E_{c.m.} = 3$  MeV and the  $^{14}\text{O}(\alpha,p)^{17}\text{F}$  rate”  
D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, M. Howard, C. Matei, W. Martin, M. Matos, B.H. Moazen, C.D. Nesaraja, W.A. Peters, S.T. Pittman, M.S. Smith, I. Spassova  
Phys. Rev. C **81**, 065802 (2010)
- “The magic nature of  $^{132}\text{Sn}$  explored through the single-particle states of  $^{133}\text{Sn}$ ”  
K.L. Jones, A.S. Adekola, D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, K. Chipps, J.A. Cizewski, L. Erikson, C. Harlin, R. Hatarik, R. Kapler, R.L. Kozub, J.F. Liang, R. Livesay, Z. Ma, B.H. Moazen, C.D. Nesaraja, F.M. Nunes, S.D. Pain, N.P. Patterson, D. Shapira, J.F. Shriner Jr., M.S. Smith, T.P. Swan, J.S. Thomas  
Nature **465**, 454 (2010)
- “Neutron-proton asymmetry dependence of spectroscopic factors in Ar isotopes”  
Jenny Lee, M.B. Tsang, D. Bazin, D. Coupland, V. Henzl, D. Henzlova, M. Kilbrun, W.G. Lynch, A. Rogers, A. Sanetullaev, A. Signoracci, Z.Y. Sun, M. Youngs, **K.Y. Chae**, R.J. Charity, H.K. Cheung, M. Famiano, S. Hudan, P.D. O’Malley, W.A. Peters, K. Schmitt, D. Shapira, L.G. Sobotka  
Phys. Rev. Lett. **104**, 112701 (2010)
- “Comment on “Low-energy  $^{18}\text{F}(p,\alpha)^{18}\text{O}$  cross section measurements relevant to nova  $\gamma$ -ray emission””  
J.F. Shriner, Jr., D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, R.L. Kozub, M.S. Smith  
Phys. Rev. C **81**, 039801 (2010)
- “The  $^{17}\text{F}(p,\gamma)^{18}\text{Ne}$  resonant cross section”  
K.A. Chipps, D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, U. Greife, R. Hatarik, R.L. Kozub, C. Matei, B.H. Moazen, C.D. Nesaraja, S.D. Pain, W.A. Peters, S.T. Pittman, J.F. Shriner, Jr., M.S. Smith  
Phys. Rev. C **80**, 065810 (2009)
- “Constraint on the astrophysical  $^{18}\text{Ne}(\alpha,p)^{21}\text{Na}$  reaction rate through a  $^{24}\text{Mg}(p,t)^{22}\text{Mg}$  measurement”  
**K.Y. Chae**, D.W. Bardayan, J.C. Blackmon, K.A. Chipps, R. Hatarik, K.L. Jones, R.L. Kozub, J.F. Liang, C. Matei, B.H. Moazen, C.D. Nesaraja, P.D. O’Malley, S.D. Pain, S.T. Pittman, M.S. Smith  
Phys. Rev. C **79**, 055804 (2009)
- “First direct measurement of the  $^{17}\text{F}(p,\gamma)^{18}\text{Ne}$  cross section”  
K.A. Chipps, D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, U. Greife, R. Hatarik, R.L. Kozub, C. Matei, B.H. Moazen, C.D. Nesaraja, S.D. Pain, W.A. Peters, S.T. Pittman, J.F. Shriner, Jr., M.S. Smith  
Phys. Rev. Lett. **102**, 152502 (2009)
- “Direct measurements of  $(p,\gamma)$  cross sections at astrophysical energies using radioactive beams and the Daresbury Recoil Separator”  
D.W. Bardayan, K.A. Chipps, R.P. Fitzgerald, J.C. Blackmon, **K.Y. Chae**, A.E. Champagne, U. Greife, R. Hatarik, R.L. Kozub, C. Matei, B.H. Moazen, C.D. Nesaraja, S.D. Pain, W.A. Peters, S.T. Pittman, J.F. Shriner, Jr., M.S. Smith  
Eur. Phys. J. A **42**, 457 (2009)
- “MEASUREMENT OF THE 330 keV RESONANCE IN  $^{18}\text{F}(p,\alpha)^{15}\text{O}$ ”  
B.H. Moazen, J.C. Blackmon, D.W. Bardayan, **K.Y. Chae**, K. Chipps, K.L. Grzywacz, R.L. Kozub, C. Matei, C.D. Nesaraja, S.D. Pain, J.F. Shriner Jr., M.S. Smith  
Acta Physica Polonica B **40**, 699 (2009)
- “Spectroscopic study of low-lying  $^{16}\text{N}$  levels”  
D.W. Bardayan, P.D. O’Malley, J.C. Blackmon, **K.Y. Chae**, K.A. Chipps, J.A. Cizewski, R. Hatarik, K.L. Jones, R.L. Kozub, C. Matei, B.H. Moazen, C.D. Nesaraja, S.D. Pain, S. Paulauskas, W.A. Peters, S.T. Pittman, K.T. Schmitt, J.F. Shriner, Jr., M.S. Smith  
Phys. Rev. C **78**, 052801(R) (2008)

# KYUNGYUK CHAE

---

- “Measurement of the 183 keV resonance in  $^{17}\text{O}(p,\alpha)^{14}\text{N}$  using a novel technique”  
B.H. Moazen, D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, K. Chipps, C.P. Domizioli, R. Fitzgerald, U. Greife, W.R. Hix, K.L. Jones, R.L. Kozub, E.J. Lingerfelt, R.J. Livesay, C.D. Nesaraja, S.D. Pain, L.F. Roberts, J.F. Shriner Jr., M.S. Smith, J.S. Thomas  
Phys. Rev. C **75**, 065801(R) (2007)
- “Single neutron transfer experiments close to the  $r$ -process path”  
K.L. Jones, A.S. Adekola, D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, K. Chipps, J.A. Cizewski, D.J. Dean, L. Erikson, R.P. Fitzgerald, A.L. Gaddis, U. Greife, C. Harlin, R. Hatarik, J.A. Howard, M.S. Johnson, R.L. Kozub, J.F. Liang, R.J. Livesay, Z. Ma, B.H. Moazen, P.D. O’Malley, C.D. Nesaraja, S.D. Pain, N.P. Patterson, S.V. Paulauskas, D. Shapira, J.F. Shriner Jr., D.J. Sissom, M.S. Smith, T.P. Swan, J.S. Thomas  
Acta Physica Polonica B **38**, 1205 (2007)
- “First experimental constraints on the interference of  $3/2^+$  resonances in the  $^{18}\text{F}(p,\alpha)^{15}\text{O}$  reaction”  
**K.Y. Chae**, D.W. Bardayan, J.C. Blackmon, D. Gregory, M.W. Guidry, M.S. Johnson, R.L. Kozub, R.J. Livesay, Z. Ma, C.D. Nesaraja, S.D. Pain, S. Paulaskas, M. Porter-Peden, J.F. Shriner Jr., N. Smith, M.S. Smith, J.S. Thomas  
Phys. Rev. C **74**, 012801(R) (2006)
- “Astrophysically important  $^{26}\text{Si}$  states studied with the  $^{28}\text{Si}(p,t)^{26}\text{Si}$  reaction. II. Spin of the 5.914-MeV  $^{26}\text{Si}$  level and galactic  $^{26}\text{Al}$  production”  
D.W. Bardayan, J.A. Howard, J.C. Blackmon, C.R. Brune, **K.Y. Chae**, W.R. Hix, M.S. Johnson, K.L. Jones, R.L. Kozub, J.F. Liang, E.J. Lingerfelt, R.J. Livesay, S.D. Pain, J.P. Scott, M.S. Smith, J.S. Thomas, D.W. Visser  
Phys. Rev. C **74**, 045804 (2006)
- “A New Computational Infrastructure For Nuclear Astrophysics”  
C.D. Nesaraja, E.L. Lingerfelt, J.P. Scott, M.S. Smith, W.R. Hix, D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, M.W. Guidry, R.A. Meyer  
Nucl. Phys. A **758**, 174c (2005)
- “Nuclear data on unstable nuclei for astrophysics”  
M.S. Smith, R.A. Meyer, D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, M.W. Guidry, W.R. Hix, R.L. Kozub, E.J. Lingerfelt, Z. Ma, J.P. Scott  
Nucl. Phys. A **746**, 569c (2004)

## PUBLICATIONS - Scopus

- “Study of energy levels in radionuclide  $^{23}\text{Mg}$  using proton beams and  $^{24}\text{Mg}$  target”  
**Kyung Yuk Chae**, Min Sik Kwag, Eun Ji Lee, Kyujin Kwak  
New Physics: Sae Mulli 66, 1518 (2016)
- “Effects of Rare Isotope Reaction Rates on the Light Curve of X-ray Burst”  
Byeongchan Park, Kyujin Kwak, **Kyung Yuk Chae**, Aram Kim  
New Physics: Sae Mulli 66, 1524 (2016)

## PROCEEDINGS

- “Using  $^{19}\text{F}(^3\text{He},t)^{19}\text{Ne}^*(\gamma)$  to Study Astrophysically Important Levels Near the  $^{19}\text{F}+p$  Threshold”  
M.R. Hall, D.W. Bardayan, T. Baugher, S. Ahn, J.M. Allen, J.T. Anderson, A.D. Ayangeakaa, J.C. Blackmon, D. Blankstein, S. Burcher, M.P. Carpenter, S.M. Cha, **K.Y. Chae**, K.A. Chipps, J.A. Cizewski, M. Febraro, B. Frentz, O. Hall, S.L. Henderson, J. Hu, C.L. Jiang, K.L. Jones, E.J. Lee, A. Lepailleur, D.S. Monteiro, P.D. O’Malley, S. Ota, S.D. Pain, B.C. Rasco, A. Ratkiewicz, J. Riggins, D. Santiago-Conzales, D. Seweryniak, A. Simon, H. Sims, K. Smith, W.P. Tan, P. Thompson, C. Thornsberry, R. Torres-Isea, B. Vande Kolk, R.L. Varner, D. Walter, G.L. Wilson, S. Zhu  
submitted to the proceedings of the 25th Conference on Application of Accelerators in Research and Industry (CAARI) (2018)
- “Measurements of the  $^7\text{Be}+n$  Big-Bang nucleosynthesis reactions at CRIB by the Trojan Horse method”  
S. Hayakawa, K. Abe, O. Beliuskina, S.M. Cha, **K.Y. Chae**, S. Cherubini, P. Figuera, Z. Ge, M. Gulino, J. Hu, A. Inoue, N. Iwasa, D. Kahl, A. Kim, D.H. Kim, G. Kiss, S. Kubono, M. La Cognata, M. La Commara, L. Lamia, M. Lattuada, E.J. Lee, J.Y. Moon, S. Palmerini, C. Parascandolo, S.Y. Park, D. Pierroutsakou, R.G. Pizzone, G.G. Rapisarda, S. Romano, H. Shimizu, C. Spitaleri, X.D. Tang, O. Trippella, A. Tumino, P. Vi, H. Yamaguchi, L. Yang, N.T. Zhang  
submitted to the proceedings of the 8th Nuclear Physics in Astrophysics International conference 2017 (NPA8) (2017)
- “Isomeric  $^{26}\text{Al}$  beam production with CRIB”  
H. Shimizu, D. Kahl, H. Yamaguchi, K. Abe, O. Beliuskina, S.M. Cha, **K.Y. Chae**, A.A. Chen, Z. Ge, S. Hayakawa, N. Imai, N. Iwasa, A. Kim, D.H. Kim, M.J. Kim, S. Kubono, M.S. Kawag, J. Liang, J.Y. Moon, S. Nishimura, S. Oka, S.Y. Park, A. Psaltis, T. Teranishi, Y. Ueno, L. Yang  
EPJ Web of Conferences 184, 02013 (2018)
- “ $\beta - \gamma$  and isomeric decay spectroscopy of  $^{168}\text{Dy}$ ”  
G.X. Zhang, H. Watanabe, F.G. Kondev, G.J. Lane, P.H. Regan, P.-A. Soderstrom, P.M. Walker, H. Kanaoka, Z. Korkulu, P.S. Lee, J.J. Liu, S. Nishimura, J. Wu, A. Yagi, D.S. Ahn, T. Alharbi, H. Baba, F. Browne, A.M. Bruce, R.J. Carroll, **K.Y. Chae**, Zs. Dombradi, P. Doornenbal, A. Estrade, N. Fukuda, C. Griffin, E. Ideguchi, N. Inabe, T. Isobe, S. Kanaya, I. Kojouharov, T. Kubo, S. Kubono, N. Kurz, I. Kuti, S. Lalkovski, C.S. Lee, E.J. Lee, G. Lorusso, G. Lotay, C.-B. Moon, I. Nishizuka, C.R. Nita, A. Odahara, Z. Patel, V.H. Phong, Zs. Podolyak, O.J. Roberts, H. Sakurai, H. Schaffner, C.M. Shand, Y. Shimizu, T. Sumikama, H. Suzuki, H. Takeda, S. Terashima, Zs. Vajta, J.J. Valiente-Dobon, and Z.Y. Xu  
EPJ Web of Conferences 178, 02023 (2018)
- “Indirect studies on astrophysical reactions at the low-energy RI beam separator CRIB”  
H. Yamaguchi, D. Kahl, S. Hayakawa, L. Yang, H. Shimizu, Y. Sakaguchi, K. Abe, Y. Wakabayashi, T. Hashimoto, T. Nakao, S. Kubono, T. Suhara, N. Iwasa, A. Kim, D.H. Kim, S.M. Cha, M.S. Kwag, J.H. Lee, E.J. Lee, **K.Y. Chae**, N. Imai, N. Kitamura, P. Lee, J.Y. Moon, K.B. Lee, C. Akers, H.S. Jung, N.N. Duy, L.H. Khiem, C.S. Lee, S. Cherubini, M. Gulino, C. Spitaleri, G.G. Rapisarda, M. La Cognata, L. Lamia, S. Romano, A. Coc, N. de Sereville, F. Hammache, G. Kiss, S. Bishop, T. Teranishi, T. Kawabata, Y.K. Kwon, D. N. Binh  
AIP Conference Proceedings 1947, 020022 (2018)
- “Measurements of the Neutron-Induced Reactions on  $^7\text{Be}$  with CRIB by the Trojan Horse Method”  
S. Hayakawa, K. Abe, O. Beliuskina, S.M. Cha, **K.Y. Chae**, S. Cherubini, P. Figuera, Z. Ge, M. Gulino, J. Hu, A. Inoue, N. Iwasa, D. Kahl, A. Kim, D.H. Kim, G. Kiss, S. Kubono, M. La Cognata, M. La Commara, L. Lamia, M. Lattuada, E.J. Lee, J.Y. Moon, S. Palmerini, C. Parascandolo, S.Y. Park, D. Pierroutsakou, R.G. Pizzone, G.G. Rapisarda, S. Romano, H. Shimizu, C. Spitaleri, X.D. Tang, O. Trippella, A. Tumino, P. Vi, H. Yamaguchi, L. Yang, N.T. Zhang  
AIP Conference Proceedings 1947, 020011 (2018)

# KYUNGYUK CHAE

---

- “Impact of the  $^{26m}\text{Al}(p,\gamma)$  Reaction to Galactic  $^{26}\text{Al}$  Yield”  
D. Kahl, H. Shimizu, H. Yamaguchi, K. Abe, O. Beliuskina, S.M. Cha, **K.Y. Chae**, A.A. Chen, Z. Ge, S. Hayakawa, N. Imai, N. Iwasa, A. Kim, D.H. Kim, M. J. Kim, S. Kubono, M. S. Kwag, J. Liang, J.Y. Moon, S. Nishimura, S. Oka, S. Y. Park, A. Psaltis, T. Teranishi, Y. Ueno, L. Yang  
AIP Conference Proceedings 1947, 020003 (2018)
- “Nuclear astrophysics projects at the low-energy RI beam separator CRIB”  
H. Yamaguchi, D. Kahl, S. Hayakawa, L. Yang, H. Shimizu, Y. Sakaguchi, K. Abe, T. Nakao, T. Suhara, N. Iwasa, D.H. Kim, S.M. Cha, M.S. Kwag, J.H. Lee, E.J. Lee, **K.Y. Chae**, Y. Wakabayashi, N. Imai, N. Kitamura, P. Lee, J.Y. Moon, K.B. Lee, C. Akers, H.S. Jung, N.N. Duy, L.H. Khiem, C.S. Lee, T. Hashimoto, S. Kubono, T. Kawabata, T. Teranishi, Y.K. Kwon, D.N. Binh  
EPJ Web of Conferences 165, 01056 (2017)
- “Isomer beam elastic scattering:  $^{26m}\text{Al}(p,p)$  for astrophysics”  
D. Kahl, H. Shimizu, H. Yamaguchi, K. Abe, O. Beliuskina, S.M. Cha, **K.Y. Chae**, A.A. Chen, Z. Ge, S. Hayakawa, N. Imai, N. Iwasa, A. Kim, D.H. Kim, M.J. Kim, S. Kubono, M.S. Kwag, J. Liang, J.Y. Moon, S. Nishimura, S. Oka, S.Y. Park, A. Psaltis, T. Teranishi, Y. Ueno, L. Yang  
EPJ Web of Conferences 165, 01030 (2017)
- “X-ray Burst Studies with the JENSA Gas Jet Target”  
K. Schmidt, K.A. Chipps, S. Ahn, J.M. Allen, S. Ayoub, D.W. Bardayan, J.C. Blackmon, D. Blankstein, J. Browne, S.M. Cha, **K.Y. Chae**, J. Cizewski, C.M. Deibel, E. Deleeuw, O. Gomez, U. Greife, U. Hager, M.R. Hall, K.L. Jones, A. Kontos, R.L. Kozub, E.J. Lee, A. Lepailleur, L.E. Linhardt, M. Matos, Z. Meisel, F. Montes, P.D. O’Malley, W. Ong, S.D. Pain, A. Sachs, H. Schatz, K.T. Schmitt, K. Smith, M.S. Smith, N.F. Soares de Bem, P.J. Thompson, R. Toomey, D. Walter  
EPJ Web of Conferences 165, 01043 (2017)
- “Isomer-Delayed Gamma-ray Spectroscopy of Neutron-Rich  $^{166}\text{Tb}$ ”  
L.A. Gurgi, P.H. Regan, P.-A. Soderstrom, H. Watanabe, P.M. Walker, Zs. Podolyak, S. Nishimura, T.A. Berry, P. Doornenbal, G. Lorusso, T. Isobe, H. Baba, Z.Y. Xu, H. Sakurai, T. Sumikama, W.N. Catford, A.M. Bruce, F. Browne, G.J. Lane, F.G. Kondev, A. Odahara, J. Wu, H.L. Liu, F.R. Xu, Z. Korkulu, P. Lee, J.J. Liu, V.H. Phong, A. Yagi, G.X. Zhang, T. Alharbi, R.J. Carroll, **K.Y. Chae**, Zs. Dombardi, A. Estrade, N. Fukuda, C. Griffin, E. Ideguchi, N. Inabe, H. Kanaoka, I. Kojouharov, T. Kubo, S. Kubono, N. Kurz, I. Kuti, S. Lalkovski, E.J. Lee, C.S. Lee, G. Lotay, C.-B. Moon, I. Nishizuka, C.R. Nita, Z. Patel, O.J. Roberts, H. Schaffner, C.M. Shand, H. Suzuki, H. Takeda, S. Terashima, Zs. Vajta, S. Kanaya, J.J. Valiente-Dobon  
EPJ Web of Conferences 146, 10009 (2017)
- “Direct reaction measurements using GODDESS”  
S.D. Pain, A. Ratkiewicz, T. Baugher, M. Febraro, A. Lepailleur, A.D. Ayangeakaa, J. Allen, J.T. Anderson, D.W. Bardayan, J.C. Blackmon, R. Blanchard, S. Burcher, M.P. Carpenter, S.M. Cha, **K.Y. Chae**, K.A. Chipps, J.A. Cizewski, A. Engelhardt, H. Garland, K.L. Jones, R.L. Kozub, E.J. Lee, M.R. Hall, O. Hall, J. Hu, P.D. O’Malley, I. Marsh, B.C. Rasco, D. Santigao-Gonzales, D. Seweryniak, S. Shadrack, H. Sims, K. Smith, M.S. Smith, P.-L. Tai, P. Thompson, C. Thornsberry, R.L. Varner, D. Walter, G.L. Wilson, S. Zhu  
Proceedings of Conference on the Application of Accelerators in Research and Industry, Physics Procedia 90 (2017) 455
- “Transfer reactions with  $^{134}\text{Xe}$ ”  
S.D. Pain, K.A. Chipps, M. Febraro, I. Marsh, M.S. Smith, R.L. Varner, T. Baugher, J.A. Cizewski, H. Garland, A. Lepailleur, A. Ratkiewicz, H. Sims, P.L. Tai, D. Walter, S. Burcher, K.L. Jones, K. Smith, P. Thompson, C. Thornsberry, A. Engelhardt, R.L. Kozub, S. Shadrack, J. Anderson, M. Carpenter, D. Seweryniak, S. Zhu, J. Allen, D.W. Bardayan, M.R. Hall, O. Hall, J. Hu, P.D. O’Malley, S.M. Cha, **K.Y. Chae**, E.J. Lee, G.L. Wilson

# KYUNGYUK CHAE

---

Fission And Properties Of Neutron-rich Nuclei-Proceedings Of The Sixth International Conference On Icfn6, World Scientific (2017), pp. 267

- “Study on  $\alpha$ -cluster levels in non-4n nuclei using low-energy RI beams”  
H. Yamaguchi, D. Kahl, S. Hayakawa, Y. Sakaguchi, K. Abe, T. Nakao, T. Suhara, N. Iwasa, A. Kim, D.H. Kim, S.M. Cha, M.S. Kwag, J.H. Lee, E.J. Lee, **K.Y. Chae**, Y. Wakabayashi, N. Imai, N. Kitamura, P. Lee, J.Y. Moon, K.B. Lee, C. Akers, H.S. Jung, N.N. Duy, L.H. Khiem, C.S. Lee  
11th International Conference on Clustering Aspects of Nuclear Structure and Dynamics, IOP Conf. Series: Journal of Physics: Conf. Series 863, 012025 (2017)
- “Collective And Single-particle Structures In The Neutron-rich Doubly Mid-shell Nucleus  $^{170}\text{Dy}$ ”  
P.-A. Soderstrom, P.M. Walker, J. Wu, H.L. Liu, P.H. Regan, H. Watanabe, P. Doornenbal, Z. Korkulu, P. Lee, J.J. Liu, G. Lorusso, S. Nishimura, V.H. Phone, T. Sumikama, F.R. Xu, A. Yagi, G.X. Zhang, D.S. Ahn, T. Alharbi, H. Baba, F. Browne, A.M. Bruce, R.J. Carroll, **K.Y. Chae**, Zs. Dombradi, A. Estrade, N. Fukuda, C. Griffin, E. Ideguchi, N. Inabe, T. Isobe, H. Kanaoka, S. Kanaya, I. Kojouharov, F.G. Kondev, T. Kubo, S. Kubono, N. Kurz, I. Kuti, S. Lalkovski, G.J. Lane, E.J. Lee, C.S. Lee, G. Lotay, C.-B. Moon, I. Nishizuka, C.R. Nita, A. Odahara, Z. Patel, Zs. Podolyak, O.J. Roberts, H. Sakurai, H. Schaffner, C.M. Shand, H. Suzuki, H. Takeda, S. Terashima, Zs. Vajta, J.J. Valiente-Dobon, Z.Y. Xu  
Proceedings of the 26th International Nuclear Physics Conference, PoS (INPC2016) 072 (2017)
- “X-ray Burst Studies with the JENSA Gas Jet Target”  
K. Schmidt, K.A. Chipps, S. Ahn, J.M. Allen, D.W. Bardayan, J.C. Blackmon, D. Blankstein, J. Browne, K.Y. Chae, J. Cizewski, C.M. Deibel, O. Gomez, U. Greife, U. Hager, M.R. Hall, K.L. Jones, A. Kontos, R.L. Kozub, L.E. Linhardt, M. Matos, Z. Meisel, F. Montes, P.D. O’Malley, W. Ong, S.D. Pain, S.T. Pittman, A. Sachs, H. Schatz, K.T. Schmitt, K. Smith, M.S. Smith, N.F. Soares de Bem, P.J. Thompson, R. Toomey, D. Walter, C. Wrede  
JPS Conf. Proc. 14, 021107 (2017)
- “Study of  $\alpha$  cluster structure in  $^{22}\text{Mg}$ ”  
S.M. Cha, **K.Y. Chae**, K. Abe, S.H. Bae, S.H. Choi, D.N. Binh, N.N. Duy, K.I. Hahn, S. Hayakawa, B.S. Hong, D. Kahl, L.H. Khiem, A. Kim, D.H. Kim, E.J. Kim, G.W. Kim, M.J. Kim, K.J. Kwag, M.S. Kwag, Y.K. Kwon, C.S. Lee, E.J. Lee, S.I. Lim, B. Moon, J.Y. Moon, T. Nakao, S.Y. Park, H. Shimizu, H. Yamaguchi, L. Yang, G. Zhuang  
Il Nuovo Cimento 39 C, 371 (2016)
- “Explosive destruction of  $^{26}\text{Al}$ ”  
D. Kahl, H. Yamaguchi, H. Shimizu, K. Abe, O. Beliuskina, S.M. Cha, **K.Y. Chae**, Z. Ge, S. Hayakawa, M.S. Kwag, D.H. Kim, J.Y. Moon, S.Y. Park, L. Yang  
Il Nuovo Cimento 39 C, 362 (2016)
- “Direct Reaction Experimental Studies with Beams of Radioactive Tin Ions”  
K.L. Jones, S. Ahn, J.M. Allmond, A. Ayres, D.W. Bardayan, T. Baugher, D. Bazin, J.R. Beene, J.S. Berryman, A. Bey, C. Bingham, S. Burcher, L. Cartegni, G. Cerizza, **K.Y. Chae**, J.A. Cizewski, A. Gade, A. Galindo-Uribarri, R.F. Garcia-Ruiz, R. Grzywacz, M.E. Howard, R.L. Kozub, J.F. Liang, B. Manning, M. Matos, S. McDaniel, D. Miller, C.D. Nesaraja, P.D. O’Malley, S. Padgett, E. Padilla-Rodal, S.D. Pain, S.T. Pittman, D.C. Radford, A. Ratkiewicz, K.T. Schmitt, A. Shore, M.S. Smith, D.W. Stracener, S.R. Stroberg, J. Tostevin, R.L. Varner, D. Weisshaar, K. Wimmer, R. Winkler  
AIP Conf. Proc. **1681**, 060010 (2015)
- “Heavy Rotation - Evolution of quadrupole collectivity centred at the neutron-rich doubly mid-shell nucleus  $^{170}\text{Dy}$ ”  
P.-A. Soderstrom, P.H. Regan, P.M. Walker, H. Watanabe, P. Doornenbal, Z. Korkulu, P. Lee, H.L. Liu, J.J. Liu, G. Lorusso, S. Nishimura, T. Sumikama, V.H. Phong, J. Wu, F.R. Xu, A. Yagi, G.X. Zhang, T.



Alhabi, H. Baba, F. Browne, A.M. Bruce, R. Carroll, **K.Y. Chae**, Zs. Dombradi, A. Estrade, N. Fukuda, C. Griffin, E. Ideguchi, N. Inabe, T. Isobe, H. Kanaoka, I. Kojouharov, F.G. Kondev, T. Kubo, S. Kubono, N. Kurz, I. Kuti, S. Lalkovski, G.J. Lane, C.S. Lee, E.J. Lee, G. Lotay, C.-B. Moon, I. Nishizuka, C.R. Nita, A. Odahara, Z. Patel, Zs. Podolyak, O.J. Roberts, H. Sakurai, H. Schaffner, C.M. Shand, H. Suzuki, H. Takeda, S. Terashima, Zs. Vajta, J.J. Valiente-Dobon, Z.Y. Xu, S. Yoshida  
AIP Conf. Proc. **1681**, 030010 (2015)

- “Shape Evolution in Neutron-rich Ru Nuclei”  
P.-A. Söderström, G. Lorusso, H. Watanabe, S. Nishimura, P. Doornenbal, F. Browne, A.M. Bruce, R. Daido, Y. Fang, G. Gey, H.S. Jung, I. Nishizuka, Z. Patel, S. Rice, L. Sinclair, T. Sumikama, J. Taprogge, Zs. Vajta, J. Wu, Z.Y. Xu, H. Baba, G. Benzoni, R. Carroll, **K.Y. Chae**, F.C.L. Crespi, N. Fukuda, R. Gernhauser, E. Ideguchi, N. Inabe, T. Isobe, A. Jungclaus, D. Kameda, G.D. Kim, Y.-K. Kim, I. Kojouharov, F.G. Kondev, T. Kubo, N. Kurz, Y.K. Kwon, S. Lalkovski, G.J. Lane, Z. Li, R. Lozeva, A. Montaner-Piza, K. Moschner, F. Naqvi, M. Niikura, H. Nishibata, A. Odahara, R. Orlandi, Zs. Podolyak, P.H. Regan, O.J. Roberts, H. Sakurai, H. Schaffner, G. Simpson, K. Steiger, H. Suzuki, H. Takeda, M. Tanaka, A. Wendt, V. Werner, O. Wieland, A. Yagi, K. Yoshinaga  
JPS Conf. Proc. **6**, 030013 (2015)
- “ $\beta$ -delayed  $\alpha$  decay of  $^{16}\text{N}$  and the  $^{12}\text{C}(\alpha, \gamma)^{16}\text{O}$  cross section at astrophysical energies: A new experimental approach”  
S. Sanfilippo, S. Cherubini, S. Hayakawa, A. Di Pietro, P. Figuera, M. Gulino, M. La Cognata, M. Lattuada, C. Spitaleri, H. Yamaguchi, D. Kahl, T. Nakao, S. Kubono, Y. Wakabayashi, T. Hashimoto, N. Iwasa, Y. Okoda, K. Ushio, T. Teranishi, M. Mazzocco, C. Signorini, D. Torresi, J.Y. Moon, T. Komatsubara, P.S. Lee, **K.Y. Chae**, M.S. Gwak  
AIP Conference Proceedings **1645**, 387 (2015)
- “Nuclear clusters studied with alpha resonant scatterings using RI beams at CRIB”  
H. Yamaguchi, D. Kahl, T. Nakao, Y. Wakabayashi, T. Hashimoto, S. Hayakawa, T. Kawabata, T. Teranishi, Y.K. Kwon, D.N. Binh, L.H. Khiem, N.N. Duy, S. Kubono, T. Suhara, Y. Kanada-En’yo, J.Y. Moon, A. Kim, N. Iwasa, P.S. Lee, **K.Y. Chae**, S.M. Cha, M.S. Gwak, D.H. Kim, E. Milman  
Proceedings of 3rd International Workshop on “State of the Art in Nuclear Cluster Physics”, J. Phys.: Conf. Ser. **569** 012019 (2014).
- “Probing single-neutron levels in  $^{127,129}\text{Sn}$  via transfer reactions”  
B. Manning, J.A. Cizewski, M.E. Howard, P.D. O’Malley, A. Ratkiewicz, R.L. Kozub, S. Ahn, K.L. Jones, S.T. Pittman, J.M. Allmond, D.W. Bardayan, J.R. Beene, A. Galindo-Uribarri, J.F. Liang, C.D. Nesaraja, S.D. Pain, D.C. Radford, K.T. Schmitt, D. Shapira, M.S. Smith, **K.Y. Chae**, K.A. Chipps, M. Matos, E. Padilla-Rodal, W.A. Peters  
Proceedings of The Fifth International Conference on Fission and Properties of Neutron-Rich Nuclei, World Scientific (2013), pp. 570
- “HRIBF studies of  $r$ -process nuclei and first results with the new SuperORRUBA detector”  
D.W. Bardayan, S. Ahn, J.C. Blackmon, **K.Y. Chae**, K.A. Chipps, J.A. Cizewski, S. Hardy, M.E. Howard, K.L. Jones, R.L. Kozub, P.D. O’Malley, B. Manning, M. Matos, C.D. Nesaraja, S.D. Pain, W.A. Peters, S.T. Pittman, A. Ratkiewicz, K.T. Schmitt, M.S. Smith, I. Spassova, S. Strauss  
Proceedings of 11th Conference on the Intersections of Particle and Nuclear Physics, AIP Conf. Proc. **1560**, 330 (2013)
- “The New SuperORRUBA Detector for Transfer Reaction Studies of Exotic Nuclei”  
D.W. Bardayan, S. Ahn, J.C. Blackmon, A.J. Burkhart, **K.Y. Chae**, J.A. Cizewski, J. Elson, S. Hardy, R.L. Kozub, L. Linhardt, B. Manning, M. Matos, S.D. Pain, L.G. Sobotka, M.S. Smith  
Proceedings of The 12th International Symposium on Nuclei in the Cosmos, PoS (NIC-XII) 159 (2013)

# KYUNGYUK CHAE

---

- “Neutron transfer reactions with tin beams and  $r$ -process nucleosynthesis”  
J.A. Cizewski, B. Manning, K.L. Jones, R.L. Kozub, S. Ahn, G. Arbanas, D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, K.A. Chipps, S. Hardy, R. Hatarik, M.E. Howard, R. Kapler, J.F. Liang, M. Matos, B.H. Moazen, C.D. Nesaraja, F.M. Nunes, P.D. O’Malley, S.D. Pain, W.A. Peters, S.T. Pittman, A. Ratkiewicz, K.T. Schmitt, D. Shapira, M.S. Smith  
Proceedings of The 12th International Symposium on Nuclei in the Cosmos, PoS (NIC-XII) 151 (2013)
- “Single-neutron levels near the N=82 shell closure”  
B. Manning, J.A. Cizewski, R.L. Kozub, S. Ahn, J.M. Allmond, D.W. Bardayan, J.R. Beene, **K.Y. Chae**, K.A. Chipps, A. Galindo-Uribarri, M.E. Howard, K.L. Jones, J.F. Liang, M. Matos, C.D. Nesaraja  
Proceedings of 22nd International Conference on the Application of Accelerators in Research and Industry, AIP Conf. Proc. **1525**, 548 (2013)
- “Development of the superorruba detector array and the measurement of single particle states in  $^{81}\text{Ge}$ ”  
S. Ahn, A.S. Adekola, D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, K.A. Chipps, J.A. Cizewski, J. Elson, S. Hardy, M.E. Howard, K.L. Jones, R.L. Kozub, B. Manning, M. Matos, C.D. Nesaraja, P.D. O’Malley, S.D. Pain, W.A. Peters, S.T. Pittman, B.C. Rasco, M.S. Smith, L.G. Sobotka, I. Spassova  
Proceedings of 22nd International Conference on the Application of Accelerators in Research and Industry, AIP Conf. Proc. **1525**, 541 (2013)
- “A new technique for measuring astrophysically important  $(\alpha, p)$  reactions”  
**K.Y. Chae**, S.H. Ahn, A. Ayres, D.W. Bardayan, A. Bey, M.E. Howard, K.L. Jones, R.L. Kozub, M. Matos, B.H. Moazen, C.D. Nesaraja, P.D. O’Malley, W.A. Peters, S.T. Pittman, M.S. Smith  
Proceedings of The Eleventh International Symposium on Nuclei in the Cosmos, PoS (NIC-XI) 217 (2011)
- “Proton decay of  $^{26}\text{Si}$  via the  $^{28}\text{Si}(p, t)^{26}\text{Si}$  Reaction and Implications for  $^{25}\text{Al}(p, \gamma)^{26}\text{Si}$ ”  
K.A. Chipps, D.W. Bardayan, J.F. Liang, C.D. Nesaraja, S.D. Pain, M.S. Smith, **K.Y. Chae**, B.H. Moazen, S.T. Pittman, K.T. Schmitt, J.A. Cizewski, P.D. O’Malley, W.A. Peters, R.L. Kozub, C. Matei  
Proceedings of The Eleventh International Symposium on Nuclei in the Cosmos, PoS (NIC-XI) 205 (2011)
- “Direct measurements of  $(p, \gamma)$  cross sections at astrophysical energies using radioactive beams and the Daresbury Recoil Separator”  
D.W. Bardayan, K.A. Chipps, R.P. Fitzgerald, J.C. Blackmon, **K.Y. Chae**, A.E. Champagne, U. Greife, R. Hatarik, R.L. Kozub, C. Matei, B.H. Moazen, C.D. Nesaraja, S.D. Pain, W.A. Peters, S.T. Pittman, J.F. Shriner, Jr., M.S. Smith  
Proceedings of The Eleventh International Symposium on Nuclei in the Cosmos, PoS (NIC-XI) 202 (2011)
- “Neutron capture surrogate reaction on  $^{75}\text{As}$  in inverse kinematics using  $(d, p\gamma)$ ”  
W.A. Peters, J.A. Cizewski, R. Hatarik, P.D. O’Malley, K.L. Jones, K. Schmitt, B.H. Moazen, **K.Y. Chae**, S.T. Pittman, R.L. Kozub, D. Vieira, M. Jandel, J.B. Wilhelmy, C. Matei, J. Escher, D.W. Bardayan, S.D. Pain, M.S. Smith  
Proceedings of the Second International Workshop on Compound Nuclear Reactions and Related Topics, EPJ Web of Conferences **2**, 06003 (2010)
- “Neutron-transfer reaction studies with fission fragment radioactive ion beams near  $^{132}\text{Sn}$ ”  
J.A. Cizewski, K.L. Jones, R.L. Kozub, S.D. Pain, A. Adekola, D.W. Bardayan, J.C. Blackmon, W.N. Catford, **K.Y. Chae**, K.A. Chipps, L. Erikson, A. Gaddis, U. Greife, R. Grzywacz, C. Harlin, R. Hatarik, J. Howard, J. James, M.S. Johnson, R. Kapler, W. Krolas, J.F. Liang, Z. Ma, C. Matei, B. Moazen, C.D. Nesaraja, P.D. O’Malley, S.V. Paulauskas, W.A. Peters, D. Shapira, J.F. Shriner, Jr., M. Sikora, D.J. Sissom, M.S. Smith, T.P. Swan, J.S. Thomas, G.L. Wilson  
Proceedings of 4th International Workshop on Nuclear Fission and Fission-product Spectroscopy, AIP Conf. Proc. **1175**, 147 (2009)

# KYUNGYUK CHAE

---

- “Studies of nuclei close to  $^{132}\text{Sn}$  using single-neutron transfer reactions”  
K.L. Jones, S.D. Pain, R.L. Kozub, A.S. Adekola, D.W. Bardayan, J.C. Blackmon, W.N. Catford, **K.Y. Chae**, K. Chipps, J.A. Cizewski, L. Erikson, A.L. Gaddis, U. Greife, R. Grzywacz, C. Harlin, R. Hatarik, J.A. Howard, J. James, R. Kapler, W. Krolas, J.F. Liang, Z. Ma, C. Matei, B.H. Moazen, C.D. Nesaraja, P.D. O’Malley, N.P. Patterson, S.V. Paulauskas, D. Shapira, J.F. Shriner Jr., M. Sikora, D.J. Sissom, M.S. Smith, T.P. Swan, J.S. Thomas, G.L. Wilson  
Proceedings of Fusion08, AIP Conf. Proc. **1098**, 153 (2009)
- “Searching for resonances in the unbound  $^6\text{Be}$  nucleus”  
**K.Y. Chae**, D.W. Bardayan, J.C. Blackmon, J.J. Das, M.W. Guidry, V. Guimarães, K.L. Jones, M.S. Johnson, R.L. Kozub, R.J. Livesay, Z. Ma, C.D. Nesaraja, S.D. Pain, M.S. Smith, J.S. Thomas, D.W. Visser  
Proceedings of 20th International Conference on the Application of Accelerators in Research and Industry, AIP Conf. Proc. **1099**, 803 (2009)
- “Neutron transfer reactions: Surrogates for neutron capture for basic and applied nuclear science”  
J.A. Cizewski, K.L. Jones, R.L. Kozub, S.D. Pain, W.A. Peters, A. Adekola, J. Allen, D.W. Bardayan, J.A. Becker, J.C. Blackmon, **K.Y. Chae**, K. Chipps, L. Erikson, A. Gaddis, C. Harlin, R. Hatarik, J. Howard, M. Jandel, M.S. Johnson, R. Kapler, W. Krolas, J.F. Liang, R.J. Livesay, Z. Ma, C. Matei, C. Matthews, B. Moazen, C.D. Nesaraja, P.D. O’Malley, N. Patterson, S.V. Paulauskas, T. Pelham, S. Pittman, D. Radford, J. Rogers, K. Schimitt, D. Shapira, J.F. Shriner, Jr., D.J. Sissom, M.S. Smith, T. Swan, J.S. Thomas, D.J. Vieira, J.B. Wilhelmy, G.L. Wilson  
Proceedings of 20th International Conference on the Application of Accelerators in Research and Industry, AIP Conf. Proc. **1099**, 724 (2009)
- “Neutron transfer reactions on neutron-rich  $N=50$  and  $N=82$  nuclei near the  $r$ -process path”  
J.A. Cizewski, K.L. Jones, R.L. Kozub, S.D. Pain, J.S. Thomas, G. Arbanas, A. Adekola, D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, K.A. Chipps, D. Dean, L. Erikson, A. Gaddis, C. Harlin, R. Hatarik, J. Howard, M.S. Johnson, R. Kapler, W. Krolas, J.F. Liang, R.J. Livesay, Z. Ma, C. Matei, B. Moazen, C.D. Nesaraja, P.D. O’Malley, S.V. Paulauskas, D. Shapira, J.F. Shriner, Jr., D.J. Sissom, M.S. Smith, T. Swan, G.L. Wilson  
Proceedings of The Thirteenth International Symposium on Capture Gamma-Ray Spectroscopy, AIP Conf. Proc. **1090**, 463 (2009)
- “First Direct Measurement of the  $^{17}\text{F}(p,\gamma)^{18}\text{Ne}$  Cross Section”  
K.A. Chipps, D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, U. Greife, R. Hatarik, R.L. Kozub, C. Matei, B.H. Moazen, C.D. Nesaraja, S.D. Pain, W.A. Peters, S.T. Pittman, J.F. Shriner, M.S. Smith  
Proceedings of The Thirteenth International Symposium on Capture Gamma-Ray Spectroscopy, AIP Conf. Proc. **1090**, 471 (2009)
- “Development of the ORRUBA silicon detector array”  
S.D. Pain, D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, K.A. Chipps, J.A. Cizewski, R. Hatarik, M.S. Johnson, K.L. Jones, R. Kapler, R.L. Kozub, C. Matei, B.H. Moazen, C.D. Nesaraja, P. O’Malley, M.S. Smith, J.S. Thomas  
Proceedings of The Thirteenth International Symposium on Capture Gamma-Ray Spectroscopy, AIP Conf. Proc. **1090**, 570 (2009)
- “Spin assignments of  $^{22}\text{Mg}$  through a  $^{24}\text{Mg}(p,t)^{22}\text{Mg}$  measurement”  
**K.Y. Chae**, K.L. Jones, B.H. Moazen, S.T. Pittman, D.W. Bardayan, J.C. Blackmon, J.F. Liang, M.S. Smith, K. Chipps, R. Hatarik, P.D. O’Malley, S.D. Pain, R.L. Kozub, C. Matei, C.D. Nesaraja  
Proceedings of The Tenth International Symposium on Nuclei in the Cosmos, PoS (NIC-X) 169 (2008)
- “Neutron-spectroscopic factors for low-lying  $^{16}\text{N}$  levels”  
D.W. Bardayan, P.D. O’Malley, J.C. Blackmon, **K.Y. Chae**, K.A. Chipps, J.A. Cizewski, R. Hatarik, K.L. Jones, R.L. Kozub, C. Matei, B.H. Moazen, C.D. Nesaraja, S.D. Pain, S. Paulauskas, W.A. Peters,

# KYUNGYUK CHAE

---

S.T. Pittman, K.T. Schmitt, J.F. Shriner, Jr., M.S. Smith

Proceedings of The Tenth International Symposium on Nuclei in the Cosmos, PoS (NIC-X) 067 (2008)

- “First Direct Measurement of the  $^{17}\text{F}(p,\gamma)^{18}\text{Ne}$  Cross Section”  
K. Chipps, D.W. Bardayan, C.D. Nesaraja, S.D. Pain, M.S. Smith, J.C. Blackmon, **K.Y. Chae**, B.H. Moazen, S.T. Pittman, U. Greife, R. Hatarik, W.A. Peters, R.L. Kozub, J.F. Shriner, Jr., C. Matei  
Proceedings of The Tenth International Symposium on Nuclei in the Cosmos, PoS (NIC-X) 059 (2008)
- “Neutron transfer measurements on neutron-rich  $N=82$  nuclei”  
S.D. Pain, K.L. Jones, D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, K.A. Chipps, J.A. Cizewski, R. Hatarik, R. Kappler, R.L. Kozub, J.F. Liang, B.H. Moazen, C.D. Nesaraja, D. Shapira, M.S. Smith  
Proceedings of The Tenth International Symposium on Nuclei in the Cosmos, PoS (NIC-X) 142 (2008)
- “Neutron single particle structure in  $^{131}\text{Sn}$  and the  $r$ -process”  
R.L. Kozub, A. Adekola, D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, K.A. Chipps, J.A. Cizewski, L. Erickson, R. Hatarik, K.L. Jones, W. Krolas, J.F. Liang, Z. Ma, C. Matei, B.H. Moazen, C.D. Nesaraja, S.D. Pain, D. Shapira, J.F. Shriner, Jr., M.S. Smith, T.P. Swan  
Proceedings of The Tenth International Symposium on Nuclei in the Cosmos, PoS (NIC-X) 135 (2008)
- “Astrophysically important  $^{19}\text{Ne}$  states studied with the  $^2\text{H}(^{18}\text{F},\alpha+^{15}\text{O})\text{n}$  reaction”  
A.S. Adekola, D.W. Bardayan, J.C. Blackmon, C.R. Brone, **K.Y. Chae**, A.E. Champagne, C.P. Domizioli, U. Greife, Z. Heinen, M.J. Hornish, M. Johnson, K.L. Jones, R.L. Kozub, R.J. Livesay, Z. Ma, T.N. Massey, B. Moazen, C.D. Nesaraja, S.D. Pain, J.F. Shriner, Jr., J.S. Thomas, N.D. Smith, M.S. Smith, D.W. Visser, A.V. Voinov  
Proceedings of The Tenth International Symposium on Nuclei in the Cosmos, PoS (NIC-X) 151 (2008)
- “Single-neutron structure of neutron-rich nuclei near  $N=50$  and  $N=82$ ”  
J.A. Cizewski, K.L. Jones, R.L. Kozub, S.D. Pain, D.W. Bardayan, J.C. Blackmon, A. Adekola, **K.Y. Chae**, K. Chipps, L. Erikson, A. Gaddis, C. Harlin, R. Hatarik, J. Howard, R. Kapler, W. Krolas, J.F. Liang, R.J. Livesay, Z. Ma, C. Matei, B. Moazen, C.D. Nesaraja, P. O’Malley, N. Patterson, S.V. Paulauskas, D. Shapira, J.F. Shriner, Jr., D.J. Sissom, M.S. Smith, T. Swan, J.S. Thomas, G.L. Wilson  
Proceedings of The Fourth International Conference on Fission and Properties of Neutron-Rich Nuclei, World Scientific (2008), pp. 580
- “Development of the ORRUBA: a silicon detector array for the measurement of transfer reactions in inverse kinematics”  
S.D. Pain, D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, K.A. Chipps, J.A. Cizewski, R. Hatarik, M.S. Johnson, K.L. Jones, R. Kapler, R.L. Kozub, R.J. Livesay, C. Matei, B.H. Moazen, C.D. Nesaraja, P. O’Malley, M.S. Smith, T. Swan, J.S. Thomas, G.L. Wilson  
Proceedings of The Fourth International Conference on Fission and Properties of Neutron-Rich Nuclei, World Scientific (2008), pp. 252
- “Study of interference effects in the  $^{18}\text{F}(p,\alpha)^{15}\text{O}$  reaction”  
**K.Y. Chae**, D.W. Bardayan, J.C. Blackmon, D. Gregory, M.W. Guidry, M.S. Johnson, R.L. Kozub, R.J. Livesay, Z. Ma, C.D. Nesaraja, S.D. Pain, S. Paulaskas, M. Porter-Peden, J.F. Shriner Jr., N. Smith, M.S. Smith, J.S. Thomas  
Proceedings of The Ninth International Symposium on Nuclei in the Cosmos, PoS (NIC-IX) 273 (2006)
- “The  $^{25}\text{Al}(p,\gamma)^{26}\text{Si}$  Reaction Rate in Novae”  
D.W. Bardayan, J.C. Blackmon, W.R. Hix, J.F. Liang, M.S. Smith, J.A. Howard, R.L. Kozub, C.R. Brune, **K.Y. Chae**, E.J. Lingerfelt, J.P. Scott, M.S. Johnson, K.L. Jones, S.D. Pain, J.S. Thomas, R.J. Livesay, D.W. Visser  
Proceedings of The Ninth International Symposium on Nuclei in the Cosmos, PoS (NIC-IX) 217 (2006)

# KYUNGYUK CHAE

---

- “New Features in the Computational Infrastructure for Nuclear Astrophysics”  
M.S. Smith, E.J. Lingerfelt, J.P. Scott, C.D. Nesaraja, **K.Y. Chae**, H. Koura, W.R. Hix, L.F. Roberts, D.W. Bardayan, J.C. Blackmon  
Proceedings of The Ninth International Symposium on Nuclei in the Cosmos, PoS (NIC-IX) 180 (2006)
- “Computational Infrastructure for Nuclear Astrophysics”  
M.S. Smith, E.J. Lingerfelt, J.P. Scott, C.D. Nesaraja, W.R. Hix, **K.Y. Chae**, H. Koura, R.A. Meyer, D.W. Bardayan, J.C. Blackmon, M.W. Guidry  
Proceedings of Origin of Matter and Evolution of Galaxies 2005, AIP Conf. Proc. **847**, 470 (2006)
- “New Evaluations and Computational Infrastructure for Management and Visualization of Nuclear Astrophysics Data”  
C.D. Nesaraja, M.S. Smith, D.W. Bardayan, J.C. Blackmon, **K.Y. Chae**, M.W. Guidry, W.R. Hix, R.L. Kozub, E.J. Lingerfelt, Z. Ma, R.A. Meyer, J.P. Scott, J.S. Thomas  
Proceedings of International Conference on Nuclear Data for Science and Technology, AIP Conf. Proc. **769**, 1378 (2005)
- “Recent Nuclear Astrophysics Data Activities at ORNL”  
M.S. Smith, D.W. Bardayan, J.C. Blackmon, R.A. Meyer, **K.Y. Chae**, M.W. Guidry, W.R. Hix, E.J. Lingerfelt, Z. Ma, J.P. Scott, R.L. Kozub  
Proceedings of Origins of Matter and Evolution of Galaxies 2003, World Scientific (2004), pp. 525