

KYUNGYUK CHAE

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last updated on
January 17, 2018

EXPERIENCE

- **Guest Associate Professor**, Department of Physics, University of Notre Dame Jan. 2018-Present
- **Associate Professor**, Department of Physics, Sungkyunkwan University Mar. 2016-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 GPA: 3.77
Dissertation: “Interference effects among $J^\pi=3/2^+$ resonances in ^{19}Ne system & Searching for resonances in the unbound ^6Be nucleus”
Advisor: Prof. Michael Guidry
- **Sogang University**, Seoul, South Korea Mar. 1994-Feb. 2000
B.S. in Physics (major), Mathematics (minor), February 2000

GRANTS

- **PI**, LG Yonam Foundation, 40,000 USD Jan. 2018-Present
“Developing transfer reaction measurement technique using heavy ion beams”
- **PI**, Ministry of Science, 100,000,000 KRW Jan. 2017-Present
“Detailed design and commissioning of KOBRA detector systems”

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- **Participating Researcher**, Ministry of Science, 8,600,000,000 KRW July. 2016-Present
“Center for High Energy Astrophysics”
- **PI**, Ministry of Science, 90,000,000 KRW Mar. 2016-Present
“Study of the α -cluster structure of radionuclide ^{22}Mg ”
- **PI**, Ministry of Education, 154,440,000 KRW Nov. 2015-Present
“Nuclear astrophysics study using position sensitive ionization chamber”
- **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 June 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 July 2012-June 2013
“Nuclear reaction evaluation for astrophysical phenomenon”
- **PI**, Ministry of Education, 60,000,000 KRW June 2012-May 2014
“Developing portable fast ionization chamber”

AWARDS

- Best Presentation Award
“Constraining the spins of energy levels in ^{21}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

- **Associate Professor**, Sungkyunkwan University Mar. 2016-Present
Nuclear Physics: Fall 2016, Fall 2017
General Physics I: Spring 2016, Spring 2017

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Graduate students mentored: Minsik Kwag, Soomi Cha, Eunji Lee, Jaeha Lee, Minju Kim, Duhyun Kim

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 Oct. 11, 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

CITIZENSHIP: REPUBLIC OF KOREA (SOUTH KOREA)

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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 α -cluster structure in ^{22}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}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

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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}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}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

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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

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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}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}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

- “Study of the $^2\text{H}(^7\text{Be}, p+^3\text{He}+^4\text{He})n$ reaction for resonances in ^8B ”
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}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
- “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

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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 (α,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.
- “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

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Nuclei in the Cosmos X,
Mackinac Island, Michigan, USA, July 27-August 1, 2008.

- “Spin assignments of ^{22}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 ^6Be 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 ^6Be 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 ^6Be 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
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.

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PUBLICATIONS

- “Heating factor of an intense beam in gas targets”
N.N. Duy, **K.Y. Chae**, Vinh N.T. Pham, T.V. Nhan Hao
submitted to Radiat. Phys. Chem. (2018)
- “Beam Production of ^{18}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
submitted to Nucl. Instrum. Methods A (2018)
- “Spin assignments for ^{23}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)
- “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. Lett. (2018)
- “Direct Neutron Capture Cross section on ^{80}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)
- “Study of α cluster structure in ^{22}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)
- “Study of the $^2\text{H}(^7\text{Be},p+^3\text{He}+^4\text{He})n$ reaction for resonances in ^8B ”
K.Y. Chae, J.H. Lee
accepted for publication in J. Korean Phys. Soc. (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 $^{168}\text{Tb}_{103}$ ”
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- “Measurements of the Neutron-Induced Reactions on ^7Be 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
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- “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
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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
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