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### Education

1994, B.S., Nanjing University, Nanjing, China

1997, M.S., China Institute of Atomic Energy, Beijing, China

2002, Ph.D., Texas A&M University, College Station, Texas

### Employment

August 2006 – Present	Assistant Professor University of Notre Dame, Department of Physics
May 2003–August 2006	Postdoc Physics Division, Argonne National Laboratory, Illinois
May 2002–May 2003	Postdoc Cyclotron Institute, Texas A&M University
Sept. 1997–May 2002	Research Assistant Cyclotron Institute, Texas A&M University
Sept. 1998–May 1999	Teaching Assistant Department of Physics, Texas A&M University
Sept. 1994–Aug. 1997	Research Assistant Department of Physics, China Institute of Atomic Energy, Beijing

### Professional Membership

American Physical Society

## Refereed Publications

1. “New Determination of the Astrophysical S Factor SE1 of the  $^{12}\text{C}(\alpha,\gamma)^{16}\text{O}$  Reaction,” X. D. Tang, K. E. Rehm, I. Ahmad, C. R. Brune, A. Champagne, J. P. Greene, A. A. Hecht, D. Henderson, R. V. Janssens, C. L. Jiang, L. Jisonna, D. Kahl, E. F. Moore, M. Notani, R. C. Pardo, N. Patel, M. Paul, G. Savard, J. P. Schiffer, R. E. Segel, S. Sinha, B. Shumard, and A. H. Wuosmaa, *Phys. Rev. Lett.* 99, 052502 (2007).
2. “Technological Development for Half-life Measurement of  $^{146}\text{Sm}$  Nuclide,” N. Kinoshita, T. Hashimoto, T. Nakanishi, A. Yokoyama, H. Amakawa, T. Mitsugashira, T. Ohtsuki, N. Takahashi, I. Ahmad, J.P. Greene, D.J. Henderson, C.L. Jiang, M. Notani, R.C. Pardo, N. Patel, K.E. Rehm, R. Scott, R. Vondrasek, L. Jisonna, P. Collon, D. Robertson, C. Schmitt, X.D. Tang, Y. Kashiv, and M. Paul, *Journal of Nuclear and Radiochemical Sciences*, Vol. 8, No.2, pp. 109-112 (2007).
3. “Pair correlations in nuclei involved in neutrinoless double  $\beta$  decay:  $^{76}\text{Ge}$  and  $^{76}\text{Se}$ ,” S.J.Freeman, J.P.Schiffer, A.C.C.Villari, J.A.Clark, C.Deibel, S.Gros, A.Heinz, D.Hirata, C.L.Jiang, B.P.Kay, A.Parikh, P.D.Parker, J.Qian, K.E.Rehm, X.D.Tang, V.Werner, and C.Wrede, *Phys. Rev. C* 75, 051301 (2007).
4. “First evidence of fusion hindrance for a small Q-value system,” C.L.Jiang, B.B.Back, H.Esbensen, R.V.F.Janssens, S.Misicu, K.E.Rehm, P.Collon, C.N.Davids, J.Greene, D.J.Henderson, L.Jisonna, S.Kurtz, C.J.Lister, M.Notani, M.Paul, R.Pardo, D.Peterson, D.Seweryniak, B.Shumard, X.D.Tang, I.Tanihata, X.Wang, and S.Zhu, *Phys. Lett. B* 640, 18 (2006).
5. “Indirect techniques in nuclear astrophysics: Asymptotic Normalization Coefficient and Trojan Horse,” A.M.Mukhamedzhanov, L.D.Blokhintsev, B.A.Brown, V.Burjan, S.Cherubini, C.A.Gagliardi, B.F.Irgaziev, V.Kroha, F.M.Nunes, F.Pirlepsov, R.G.Pizzone, S.Romano, C.Spitaleri, X.D.Tang, L.Trache, R.E.Tribble, and A.Tumino, *Eur. Phys.J. A* 27, Supplement 1, 205 (2006).
6. “Structure of  $^{12}\text{N}$  using  $^{11}\text{C}+p$  resonance scattering,” K.Perajarvi, C.Fu, G.V.Rogachev, G.Chubarian, V.Z.Goldberg, F.Q.Guo, D.Lee, D.M.Moltz, J.Powell, B.B.Skorodumov, G.Tabacaru, X.D.Tang, R.E.Tribble, B.A.Brown, A.Volya, and J.Cerny, *Phys. Rev. C* 74, 024306 (2006).
7. “Scattering of  $^7\text{Be}$  and  $^8\text{B}$  and the astrophysical  $S_{17}$  factor,” G. Tabacaru, A. Azhari, J. Brinkley, V. Burjan, F. Carstoiu, Changbo Fu, C.A. Gagliardi, V. Kroha, A.M. Mukhamedzhanov, X. Tang, L. Trache, R.E. Tribble, and S. Zhou, *Phys. Rev. C* 73, 025808 (2006).

8. "Hindrance of heavy-ion fusion at extreme sub-barrier energies in open-shell colliding systems," C.L. Jiang, K.E. Rehm, H. Esbensen, R.V.F. Janssens, B.B. Back, C.N. Davids, J.P. Greene, D.J. Henderson, C.J. Lister, R.C. Pardo, T. Pennington, D. Peterson, D. Seweryniak, B. Shumard, S. Sinha, X.D. Tang, I. Tanihata, S. Zhu, P. Collon, S. Kurtz, M. Paul, Phys. Rev. C71, 044613 (2005).
9. "Stellar (n, $\gamma$ ) cross section of  $^{62}\text{Ni}$ ," H. Nassar, M. Paul, I. Ahmad, D. Berkovits, M. Bettan, P. Collon, S. Dababneh, S. Ghelberg, J.P. Greene, A. Heger, M. Heil, D.J. Henderson, C.L. Jiang, C.L.F. Kappeler, H. Koivisto, S. O'Brien, R.C. Pardo, N. Patronis, T. Pennington, R. Plag, K.E. Rehm, R. Reifarth, R. Scott, S. Sinha, X. Tang, R. Vondrasek, Phys. Rev. Lett. 94, 092504 (2005).
10. "Neutron spectroscopic factors in  $^9\text{Li}$  from  $^2\text{H}(^8\text{Li},p)^9\text{Li}$ ," A.H. Wuosmaa, K.E. Rehm, J.P. Greene, D.J. Henderson, R.V.F. Janssens, C.L. Jiang, L. Jisonna, E.F. Moore, R.C. Pardo, M. Paul, D. Peterson, S.C. Pieper, G. Savard, J.P. Schiffer, R.E. Segel, S. Sinha, X. Tang, R.B. Wiringa, Phys. Rev. Lett. 94, 082502 (2005).
11. "Laser Spectroscopic Determination of the  $^6\text{He}$  Nuclear Charge Radius," L.-B. Wang, P. Mueller, K. Bailey, G.W.F. Drake, J.P. Greene, D. Henderson, R.J. Holt, R.V.F. Janssens, C.L. Jiang, Z.-T. Lu, T.P. O'Connor, R.C. Pardo, K.E. Rehm, J.P. Schiffer, X.D. Tang, Phys. Rev. Lett. 93, 142501 (2004).
12. "Determination of the direct capture contribution for  $^{13}\text{N}(p,\gamma)^{14}\text{O}$  from the  $^{14}\text{O} \rightarrow ^{13}\text{N} + p$  asymptotic normalization coefficient," X. Tang, A. Azhari, C. Fu, C.A. Gagliardi, A.M. Mukhamedzhanov, F. Pirlepesov, L. Trache, R.E. Tribble, V. Burjan, V. Kroha, F. Carstoiu and B.F. Irgaziev, Phys. Rev. C69, 055807 (2004).
13. "First studies of the  $^8\text{B}(a, p)^{11}\text{C}$  reaction," K.E. Rehm, C.L. Jiang, J.P. Greene, D. Henderson, R.V.F. Janssens, E.F. Moore, G. Mukherjee, R.C. Pardo, T. Pennington, J.P. Schiffer, S. Sinha, X.D. Tang, R.H. Siemssen, L. Jisonna, R.E. Segel, A.H. Wuosmaa, Nucl. Phys. A 746, 354c (2004).
14. "Search for temperature and N/Z dependent effects in the decay of A = 98 compound nuclei," S. Moretto, D. Fabris, M. Lunardon, S. Pesente, V. Rizzi, G. Viesti, M. Barbui, M. Cinausero, E. Fioretto, G. Prete, A. Brondi, E. Vardaci, F. Lucarelli, A. Azhari, X.D. Tang, K. Hagel, Y. Ma, A. Makeev, M. Murray, J.B. Natowitz, L. Qin, P. Smith, L. Trache, R.E. Tribble, R. Wada, J. Wang, Phys. Rev. C 69, 044604 (2004).
15. "Lowlying levels in  $^{15}\text{F}$  and the shell model potential for drip-line nuclei," V.Z. Goldberg, G.G. Chubarian, G. Tabacaru, L. Trache, R.E. Tribble, A. Aprahamian, G.V. Rogachev, B.B. Skorodumov, X.D. Tang, Phys. Rev. C 69, 031302 (2004).

16. "Asymptotic normalization coefficients for  ${}^8\text{B} \rightarrow {}^7\text{Be} + p$  from a study of  ${}^8\text{Li} \rightarrow {}^7\text{Li} + n$ ," L. Trache, A. Azhari, F. Carstoiu, H.L. Clark, C.A. Gagliardi, Y.-W. Lui, A.M. Mukhamedzhanov, X. Tang, N. Timofeyuk, R.E. Tribble, *Phys. Rev. C* **67**, 062801 (2003).
17. "Asymptotic normalization coefficients from proton transfer reactions and astrophysical S factors for the CNO  ${}^{13}\text{C}(p,\gamma){}^{14}\text{N}$  radiative capture process," A.M. Mukhamedzhanov, A. Azhari, V. Burjan, C.A. Gagliardi, V. Kroha, A. Sattarov, X. Tang, L. Trache, R.E. Tribble, *Nucl. Phys. A* **725**, 279 (2003).
18. "Beta decay of  ${}^{62}\text{Ga}$ ," B.C. Hyman, V.E. Jacob, A. Azhari, C.A. Gagliardi, J.C. Hardy, V.E. Mayes, R.G. Neilson, M. Sanchez-Vega, X. Tang, L. Trache, R.E. Tribble, *Phys. Rev. C* **68**, 015501 (2003).
19. "High Precision Measurement of the Superallowed  $0^+ \rightarrow 0^+$   $\beta$  Decay of  ${}^{22}\text{Mg}$ ," J.C. Hardy, V.E. Jacob, M. Sanchez-Vega, R.G. Neilson, A. Azhari, C.A. Gagliardi, V.E. Mayes, X. Tang, L. Trache, R.E. Tribble, *Phys. Rev. Lett.* **91**, 082501 (2003).
20. "Determination of the astrophysical S factor for  ${}^{11}\text{C}(p,\gamma){}^{12}\text{N}$  from the  ${}^{12}\text{N} \rightarrow {}^{11}\text{C} + p$  asymptotic normalization coefficient," X. Tang, A. Azhari, C.A. Gagliardi, A.M. Mukhamedzhanov, F. Pirlepesov, L. Trache, R.E. Tribble, V. Burjan, V. Kroha, F. Carstoiu, *Phys. Rev. C* **67**, 015804 (2003).
21. "Asymptotic Normalization Coefficients and the  ${}^7\text{Be}(p,\gamma){}^8\text{B}$  Astrophysical S Factor," A. Azhari, V. Burjan, F. Carstoiu, C.A. Gagliardi, V. Kroha, A.M. Mukhamedzhanov, F.M. Nunes, X. Tang, L. Trache, R.E. Tribble, *Phys. Rev. C* **63**, 055803 (2001).
22. "The  ${}^{14}\text{N}({}^7\text{Be}, {}^8\text{B}){}^{13}\text{C}$  Reaction and the  ${}^7\text{Be}(p,\gamma){}^8\text{B}$  S Factor," A. Azhari, V. Burjan, F. Carstoiu, C.A. Gagliardi, V. Kroha, A.M. Mukhamedzhanov, F.M. Nunes, X. Tang, L. Trache, R.E. Tribble, *Phys. Rev. C* **60**, 055803 (1999).
23. "Angular Distribution for the  ${}^7\text{Be}(d,n){}^8\text{B}$  Reaction at  $E(\text{c.m.}) = 5.8$  MeV and the  $S_{17}(0)$  Factor for the  ${}^7\text{Be}(p,\gamma){}^8\text{B}$  Reaction," W. Liu, X. Bai, S. Zhou, Z. Ma, Z. Li, Y. Wang, A. Li, Z. Ma, B. Chen, X. Tang, Y. Han, Q. Shen, *Phys. Rev. Lett.* **77**, 611 (1996).

### Unrefereed Publications

1. “A New  $^{13}\text{N}(p,\gamma)^{14}\text{O}$  Reaction Rate and Its Influence in Novae Nucleosynthesis,” X.D. Tang, A. Azhari, C. Fu, C.A. Gagliardi, A.M. Mukhamedzhanov, F. Pirlepesov, L. Trache, R.E. Tribble, V. Burjan, V. Kroha, F. Carstoiuand, B.F. Irgaziev, American Institute of Physics Conference Proceedings Series, V764, 329 (2005).

### Invited Talks

“The  $^{16}\text{N}$   $\beta$ -delayed  $\alpha$  decay: Today and Tomorrow,” Carpathian Summer School of Physics 2007, Sinaia, Romania, August 20th-31st, 2007

“A New Measurement of the E1 Component of the  $^{12}\text{C}(\alpha,\gamma)^{16}\text{O}$  Reaction,” Seminar, Institute of Nuclear & Particle Physics, Ohio University, Athens, Ohio, September 19, 2006.

“The  $^{16}\text{N}$  Beta-Delayed Alpha Decay,” NSCL seminar, Michigan State University, East Lansing, Michigan, February 27, 2006

“Helium burning and  $^{16}\text{N}$  beta-delayed alpha decay,” Physics Division Seminar, Argonne, Illinois, September 6, 2005

“Digital Bragg curve spectroscopy,” Heavy Ion Discussion, Argonne, Illinois, December, 2004

“Indirect measurements in charged particle induced radiative capture reaction,” Chemical Enrichment of the Early Universe, Santa Fe, New Mexico, August 9-13, 2004

“Determination of Astrophysical S-factors from ANCs via Transfer Reactions,” nuclear physics forum, Berkeley National Laboratory, Berkeley, California, January, 2003

### Synergistic Activities

Development of research program in experiment nuclear physics for undergraduate students.

Supervision of Summer REU students at the Nuclear Structure Lab (NSL).

**Collaborators in last 48 months not included in publication list:** None

**Ph.D. Advisor:** Prof. R.E. Tribble (Texas A & M)

**Postdoctoral Advisor:** Dr. K.E. Rehm (Argonne)

**Undergraduate Students in Past Five Years:** Daniel Cerrone, Justin Browne, Daniel Smith, Benito Juarez Aubry, Ching-Ting Hwang, Ansel Hillmer, Noah Schroeder, and Gina Buffaloe

**M.S. Students in Past Five Years:** Edward Martin, Paul Davies (exchange students from UK)

**Ph.D. Students in Past Five Years:** Chi Ma, Xiao Fang

**Postgrad-Scholars Sponsored in Past Five Years:** Masahiro Notani