

Curriculum Vitae

Grigory Rogachev

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Contact Information

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Education

- PhD National Research Centre “Kurchatov Institute”, Moscow, Russia 1999
 experimental nuclear physics
- MS National Research Nuclear University “MEPhI”, Moscow, Russia 1996
 experimental nuclear physics

Professional Experience

- | | | |
|----------------------|--|---------------------|
| Professor | Department of Physics & Astronomy
and Cyclotron Institute, College of Science
Texas A&M University, College Station, TX, USA | Sep 2013 - present |
| Associate Professor | Department of Physics, College of Arts and Sciences
Florida State University, Tallahassee, FL, USA. | Aug 2010 - Aug 2013 |
| Visiting Professor | National Superconducting Cyclotron Laboratory
Michigan State University, East Lansing, MI, USA. | Aug 2012 - Aug 2013 |
| Assistant Professor | Department of Physics, College of Arts and Sciences
Florida State University, Tallahassee, FL, USA. | Aug 2004 - Aug 2010 |
| Res. Assistant Prof. | Department of Physics, College of Science
University of Notre Dame, Notre Dame, IN, USA. | Mar 2003 - Jul 2004 |
| Postdoc. Res. Assoc. | Department of Physics, College of Science
University of Notre Dame, Notre Dame, IN, USA. | Mar 2000 - Feb 2003 |
| Junior Res. Assoc. | National Research Centre “Kurchatov Institute”
Moscow, Russia. | Dec 1999 - Feb 2000 |

Honors and Awards

- COFRS CRC Summer salary Award, Florida State University. (2008)
- First Year Assistant Professor Award, Florida State University. (2005)
- Kurchatov prize for “the best research work”. RRC “Kurchatov Institute”. (1998)

Fellowships

- Fellowship of *RRC “Kurchatov Institute”* for “Young researchers”. 1997-1999.
- Fellowship of CIMO (Center of International MObility) for research activity in Finland; 1996.

Research

Research Agenda

I am leading a group that is conducting research in the following areas of nuclear science:

- Structure of exotic nuclei
- Clustering phenomena in nuclear physics
- Evolution of nuclear structure with increasing imbalance between protons and neutrons
- Nuclear reactions with rare isotope beams
- Origin of chemical elements in the Universe
- Nuclear aspects of quiescent and explosive stellar evolution
- Modern instruments and methods in experimental nuclear physics

Refereed Publications

- Phys. Lett. B **754**, 323 (2016);
E. Uberseder, **G.V. Rogachev**, V.Z. Goldberg, E. Koshchiy, B.T. Roeder, M. Alcorta, G. Chubarian, B. Davids, C. Fu, J. Hooker, H. Jayatissa, D. Melconian and R.E. Tribble. “Nuclear structure beyond the neutron drip line: The lowest energy states in ${}^9\text{He}$ via their $T=5/2$ isobaric analogs in ${}^9\text{Li}$ ”.
- Phys. Rev. Lett. **114**, 071101 (2015);
M.L. Avila, **G.V. Rogachev**, E. Koshchiy, L.T. Baby, J. Belarge, K.W. Kemper, A.N. Kuchera, A.M. Mukhamedzhanov, D. Santiago-Gonzalez and E. Uberseder. “Constraining the 6.05 MeV 0^+ and 6.13 MeV 3^- Cascade Transitions in the ${}^{12}\text{C}(\alpha,\gamma){}^{16}\text{O}$ Reaction Using the Asymptotic Normalization Coefficients”; Phys. Rev. Lett. **114**, 071101 (2015).
- Phys. Rev. C **91**, 048801 (2015);
M.L. Avila, **G.V. Rogachev**, E. Koshchiy, L.T. Baby, J. Belarge, K.W. Kemper, A.N. Kuchera and D. Santiago-Gonzalez. “New measurement of the alpha asymptotic normalization coefficient of the $1/2^+$ state in ${}^{17}\text{O}$ at 6.356 MeV that dominates the ${}^{13}\text{C}(\alpha,n){}^{16}\text{O}$ reaction rate at temperatures relevant for the s-process”.
- Phys. Rev. C **90**, 024327 (2014);
M.L. Avila, **G.V. Rogachev**, V.Z. Goldberg, E.D. Johnson, K.W. Kemper, Y.M. Tchuvil’sky and A.S. Volya. “ α -cluster structure of ${}^{18}\text{O}$ ”.
- Phys. Rev. C **90**, 042801 (2014);
M.L. Avila, **G.V. Rogachev**, E. Koshchiy, L.T. Baby, J. Belarge, K.W. Kemper, A.N. Kuchera and D. Santiago-Gonzalez. “ α -Cluster Asymptotic Normalization Coefficients for Nuclear Astrophysics”.

- Phys. Rev. C **90**, 014616 (2014);
E. Martinez-Quiroz, E.F. Aguilera, D. Lizcano, P. Amador-Valenzuela, H. Garcia-Martinez, J.J. Kolata, A. Roberts, L.O. Lamm, **G. Rogachev**, V. Guimaraes, F.D. Becchetti, A. Villano, M. Ojaruega, M. Febbraro, Y. Chen, H. Jiang, P.A. DeYoung and G.F. Peaslee. “Near- and sub-barrier fusion of the Be-7+Ni-58 system”.
- J. of Exp. and Theor. Phys. **119**, 663 (2014);
N.A. Mynbayev, A.K. Nurmukhanbetova, V.Z. Gol'dberg, M.S. Golovkov, **G.V. Rogachev**, V.N. Dzyubin, M.V. Koloberdin, I.A. Ivanov and R.E. Tribble. “Study of the excitation function for the $^{13}\text{C} + ^4\text{He}$ elastic scattering with the thick-target inverse kinematics method”.
- Astrophys. J. **777**, 143 (2013);
M. La Cognata, C. Spitaleri, O. Trippella, G.G. Kiss, **G.V. Rogachev**, A.M. Mukhamedzhanov, M. Avila, G.L. Guardo, E. Koshchiy, A. Kuchera, L. Lamia, S.M.R. Puglia, S. Romano, D. Santiago and R. Sparta. “On the measurement of the $^{13}\text{C}(\alpha,n)^{16}\text{O}$ s-factor at negative energies and its influence on the s-process”.
- Phys. Rev. C **87**, 054617 (2013);
J.P. Mitchell, **G.V. Rogachev**, E.D. Johnson, L.T. Baby, K.W. Kemper, A.M. Moro, P. Peplowski, A.S. Volya and I. Wiedenhoever. “Structure of ^8B from elastic and inelastic $^7\text{Be}+p$ scattering”.
- Phys. Rev. C **86**, 044314 (2012);
V.Z. Goldberg and **G.V. Rogachev**. “Level structure of ^{10}C ”.
- Phys. Rev. Lett. **109**, 232701 (2012);
M. La Cognata, C. Spitaleri, O. Trippella, G.G. Kiss, **G.V. Rogachev**, A.M. Mukhamedzhanov, M. Avila, G.L. Guardo, E. Koshchiy, A. Kuchera, L. Lamia, S.M.R. Puglia, S. Romano, D. Santiago and R. Sparta. “Measurement of the -3 keV Resonance in the Reaction $^{13}\text{C}(\alpha,n)^{16}\text{O}$ of Importance in the s-Process”.
- Phys. Rev. Lett. **107**, 092701 (2011);
E.F. Aguilera, P. Amador-Valenzuela, E. Martinez-Quiroz, D. Lizcano, P. Rosales, H. Garcia-Martinez, A. Gomez-Camacho, J.J. Kolata, A. Roberts, L.O. Lamm, **G. Rogachev**, V. Guimaraes, F.D. Becchetti, A. Villano, M. Ojaruega, M. Febbraro, Y. Chen, H. Jiang, P.A. DeYoung, G.F. Peaslee, C. Guess, U. Khadka, J. Brown, J.D. Hinnefeld, L. Acosta, E.S. Rossi Jr., J.F.P. Huiza and T.L. Belyaeva. “Near-Barrier Fusion of the B-8+Ni-58 Proton-Halo System”.
- Phys. Rev. C **84**, 054615 (2011);
A.N. Kuchera, **G.V. Rogachev**, V.Z. Goldberg, E.D. Johnson, S. Cherubini, M. Gulino, M. La Cognata, L. Lamia, S. Romano, L.E. Miller, R.G. Pizzone, G.G. Rapisarda, M.L. Sergi, C. Spitaleri, R.E. Tribble, W.H. Trzaska and A. Tumino. “Molecular structures in T=1 states of ^{10}B ”.
- Euro. Phys. J. A **47**, 96 (2011);
M. Norrby, T. Lonnroth, V.Z. Goldberg, **G.V. Rogachev**, M.S. Golovkov, K.-. Kallman, M. Lattuada, S.V. Perov, S. Romano, B.B. Skorodumov, G.P. Tiourin, W.H.

- Trzaska, A. Tumino and A.N. Vorontsov. “Elastic alpha-particle resonances as evidence of clustering at high excitation in ^{40}Ca ”.
- Euro. Phys. J. A **47**, 73 (2011);
M. Norrby, T. Lonnroth, V.Z. Goldberg, **G.V. Rogachev**, M.S. Golovkov, K.-. Kallman, M. Lattuada, S.V. Perov, S. Romano, B.B. Skorodumov, G.P. Tiourin, W.H. Trzaska, A. Tumino and A.N. Vorontsov. “Highly excited alpha-cluster states in ^{34}S ”.
 - Phys. Lett. B **692**, 307 (2010);
V.Z. Goldberg, B.T. Roeder, **G.V. Rogachev**, G.G. Chubarian, E.D. Johnson, C. Fu, A.A. Alharbi, M.L. Avila, A. Banu, M. McCleskey, J.P. Mitchell, E. Simmons, G. Tabacaru, L. Trache and R.E. Tribble. “First observation of ^{14}F ”.
 - Euro. Phys. J. A **46**, 5 (2010);
T. Lonnroth, M. Norrby, V.Z. Goldberg, **G.V. Rogachev**, M.S. Golovkov, K.-. Kallman, M. Lattuada, S.V. Perov, S. Romano, B.B. Skorodumov, G.P. Tiourin, W.H. Trzaska, A. Tumino and A.N. Vorontsov. “Highly excited alpha-cluster states in S-32 studied with the thick-target inverse kinematics method”.
 - Phys. Rev. C **82**, 011601 (2010);
J.P. Mitchell, **G.V. Rogachev**, E.D. Johnson, L.T. Baby, K.W. Kemper, A.M. Moro, P.N. Peplowski, A. Volya and I. Wiedenhoever. “Low-lying states in ^8B ”.
 - Euro. Phys. J. A **42**, 135 (2009);
E.D. Johnson, **G.V. Rogachev**, V.Z. Goldberg, S. Brown, D. Robson, A.M. Crisp, P.D. Cottle, C. Fu, J. Giles, B.W. Green, K.W. Kemper, K. Lee, B.T. Roeder and R.E. Tribble. “Extreme α -clustering in the ^{18}O nucleus”.
 - Phys. Rev. C **80**, 045805 (2009);
E.D. Johnson, **G.V. Rogachev**, J. Mitchell, L. Miller and K.W. Kemper. “ $^{14}\text{C}(\alpha, \gamma)$ reaction rate”.
 - Phys. Rev. C **77**, 064314 (2008);
C. Fu, V.Z. Goldberg, **G.V. Rogachev**, G. Tabacaru, G.G. Chubarian, B. Skorodumov, M. McCleskey, Y. Zhai, T. Al-Abdullah, L. Trache and R.E. Tribble. “First observation of alpha-cluster states in the $^{14}\text{O}+^4\text{He}$ interaction”.
 - Phys. Rev. C **78**, 044603 (2008);
B.B. Skorodumov, **G.V. Rogachev**, A. Aprahamian, V.Z. Goldberg, J.J. Kolata, S. Almaraz, H. Amro, E.D. Johnson, L.O. Lamm, M. Quinn, A. Teymurazyan and A. Woehr. “ $T=3/2$ states in ^{13}C ”.
 - Phys. Rev. C **76**, 021603 (2007);
C. Fu, V.Z. Goldberg, A.M. Mukhamedzhanov, G.G. Chubarian, **G.V. Rogachev**, B. Skorodumov, M. McCleskey, Y. Zhai, T. Al-Abdullah, G. Tabacaru, L. Trache and R.E. Tribble. “Single and double proton emissions from the $^{14}\text{O}+^4\text{He}$ interaction”.
 - Nucl. Inst. & Meth. in Phys. Res. A **570**, 384 (2007);
R.T. Jones, T. Bogue, B.E. Evans, M. Kornicer, A.R. Dzierba, R. Gardner, J.L. Gunter,

- D. Krop, R. Lindenbusch, D.R. Rust, E. Seott, P. Smith, C. Steffen, S. Teige, D.S. Armstrong, J.H.D. Clark, L.J. Kaufman, D.J. Steiner, E. Frlez, D. Pocanic, J.J. Kolata, L.O. Lamm, **G. Rogachev**, C. Campbell, E. Collins, L. McGlinchey, P. Rubin, E. Walker, G.S. Adams, J. Napolitano, H. Crannell, D.I. Sober, R.R. Mammei and E.S. Smith. “Performance of the RADPHi detector and trigger in a high rate tagged photon beam”.
- Phys. Rev. C **75**, 014603 (2007);
G.V. Rogachev, J.J. Kolata, A.S. Volya, F.D. Becchetti, Y. Chen, P.A. DeYoung and J. Lupton. “Spectroscopy of ${}^9\text{C}$ via resonance scattering of protons on ${}^8\text{B}$ ”.
 - Phys. Rev. C **75**, 024607 (2007);
B.B. Skorodumov, **G.V. Rogachev**, P. Boutachkov, A. Aprahamian, V.Z. Goldberg, A. Mukhamedzhanov, S. Almaraz, H. Amro, F.D. Becchetti, S. Brown, Y. Chen, H. Jiang, J.J. Kolata, L.O. Lamm, M. Quinn and A. Woehr. “Lowest excited states of O-13”.
 - Nucl. Phys. A **768**, 22 (2006);
P. Boutachkov, K.H. Maier, A. Aprahamian, **G. Rogachev**, L.O. Lamm, M. Quinn, B.B. Skorodumov and A. Woehr. ”Study of the low spin states of ${}^{208}\text{Bi}$ through γ - γ spectroscopy”.
 - Phys. Rev. Lett. **97**, 192701 (2006);
E.D. Johnson, **G.V. Rogachev**, A.M. Mukhamedzhanov, L.T. Baby, S. Brown, W.T. Cluff, A.M. Crisp, E. Diffenderfer, V.Z. Goldberg, B.W. Green, T. Hinners, C.R. Hoffman, K.W. Kemper, O. Momotyuk, P. Peplowski, A. Pipidis, R. Reynolds and B.T. Roeder. “Astrophysical reaction rate for the neutron-generator reaction ${}^{13}\text{C}(\alpha, n){}^{16}\text{O}$ in asymptotic giant branch stars”.
 - Phys. Rev. C **74**, 024306 (2006);
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. “Structure of ${}^{12}\text{N}$ using ${}^{11}\text{C}+p$ resonance scattering”.
 - Phys of Atom. Nucl. **69**, 1979 (2006);
B.B. Skorodumov, **G.V. Rogachev**, P. Boutachkov, A. Aprahamian, J.J. Kolata, L.O. Lamm, M. Quinn and A. Woehr. “Investigation of the ${}^{19}\text{Na}$ nucleus via resonance elastic scattering”.
 - Phys. Rev. C **71**, 054610 (2005);
F.D. Becchetti, R.S. Raymond, D.A. Roberts, J. Lucido, P.A. DeYoung, B. Hilldore, J. Bychowski, A.J. Huisman, P.J. VanWylen, J.J. Kolata, **G. Rogachev** and J.D. Hinnefeld. “The (${}^8\text{Li}, \alpha$) reaction at low energy: Direct ${}^4\text{H}$ cluster transfer?”.
 - Phys. Rev. Lett. **95**, 132502 (2005);
P. Boutachkov, **G.V. Rogachev**, V.Z. Goldberg, A. Aprahamian, F.D. Becchetti, J.P. Bychowski, Y. Chen, G. Chubarian, P.A. DeYoung, J.J. Kolata, L.O. Lamm, G.F. Peaslee, M. Quinn, B.B. Skorodumov and A. Woehr. “Doppler shift as a tool for studies of isobaric analog states of neutron-rich nuclei: Application to ${}^7\text{He}$ ”.

- Euro. Phys. J. A **25**, 259 (2005);
P. Boutachkov, **G.V. Rogachev**, V.Z. Goldberg, A. Aprahamian, F.D. Becchetti, J.P. Bychowski, Y. Chen, G. Chubarian, P.A. DeYoung, J.J. Kolata, L.O. Lamm, G.F. Peaslee, M. Quinn, B.B. Skorodumov and A. Woehr. “Isobaric analog states of neutron-rich nuclei. Doppler shift as a measurement tool for resonance excitation functions”.
- Phys. Rev. Lett. **92**, 232502 (2004);
G.V. Rogachev, P. Boutachkov, A. Aprahamian, F.D. Becchetti, J.P. Bychowski, Y. Chen, G. Chubarian, P.A. DeYoung, V.Z. Goldberg, J.J. Kolata, L.O. Lamm, G.F. Peaslee, M. Quinn, B.B. Skorodumov and A. Woehr. “Analog states of ${}^7\text{He}$ observed via the ${}^6\text{He}(p,n)$ reaction”.
- Phys. Lett. B **596**, 26 (2004);
J.P. Bychowski, P.A. DeYoung, B.B. Hilldore, J.D. Hinnefeld, A. Vida, F.D. Becchetti, J. Lupton, T.W. O’Donnell, J.J. Kolata, **G. Rogachev** and M. Hencheck. “ ${}^{209}\text{Bi}({}^6\text{He},\alpha)$ reaction mechanisms studied near the Coulomb barrier using n- α coincidence measurements”.
- Phys. Rev. C **69**, 031302 (2004);
V.Z. Goldberg, G.G. Chubarian, G. Tabacaru, L. Trache, R.E. Tribble, A. Aprahamian, **G.V. Rogachev**, B.B. Skorodumov and X.D. Tang. “Low-lying levels in ${}^{15}\text{F}$ and the shell model potential for drip-line nuclei”.
- Nucl. Phys. A **734**, 349 (2004);
V.Z. Goldberg, **G.V. Rogachev**, J.J. Kolata, G. Chubarian, D. Aleksandrov, M.S. Golovkov, Y.T. Oganessian, A. Rodin, B. Skorodumov, R.S. Slepnev, G. Ter-Akopian and R. Wolski. “Resonance scattering ${}^8\text{He}+p$ and $T=5/2$ states in ${}^9\text{Li}$ ”.
- Phys. Rev. C **69**, 024602 (2004);
V.Z. Goldberg, **G.V. Rogachev**, W.H. Trzaska, J.J. Kolata, A. Andreyev, C. Angulo, M.J.G. Borge, S. Cherubini, G. Chubarian, G. Crowley, P. Van Duppen, M. Gorska, M. Gulino, M. Huyse, P. Jesinger, K.M. Kallman, M. Lattuada, T. Lonnroth, M. Mutterstocker, R. Raabe, S. Romano, M.V. Rozhkov, B.B. Skorodumov, C. Spitaleri, O. Tengblad and A. Tumino. “Investigation of the α -cluster structure of ${}^{22}\text{Ne}$ and ${}^{22}\text{Mg}$ ”.
- Phys. Rev. C **67**, 041603 (2003);
G.V. Rogachev, V.Z. Goldberg, J.J. Kolata, G. Chubarian, D. Aleksandrov, A. Fomichev, M.S. Golovkov, Y.T. Oganessian, A. Rodin, B. Skorodumov, R.S. Slepnev, G. Ter-Akopian, W.H. Trzaska and R. Wolski. “ $T=5/2$ states in ${}^9\text{Li}$: Isobaric analog states of ${}^9\text{He}$ ”.
- Phys. Rev. C **68**, 024602 (2003);
G.V. Rogachev, J.J. Kolata, V.Z. Goldberg, L.V. Grigorenko, F.D. Becchetti, P.A. DeYoung, J.D. Hinnefeld, L.O. Lamm, J. Lupton, T.W. O’Donnell, D.A. Roberts and S. Shaheen. “Final state interaction or a ${}^3\text{H}$ excited state?”.
- Phys. Rev. C **65**, 054616 (2002);
J.J. Kolata, V.Z. Goldberg, L.O. Lamm, M.G. Marino, C.J. O’Keeffe, **G. Rogachev**, E.F. Aguilera, H. Garcia-Martinez, E. Martinez-Quiroz, P. Rosales, F.D. Becchetti,

T.W. O'Donnell, D.A. Roberts, J.A. Brown, P.A. DeYoung, J.D. Hinnefeld and S.A. Shaheen. "Elastic scattering and transfer in the $^8\text{Li}+^{208}\text{Pb}$ system near the Coulomb barrier".

- Phys. Rev. C **63**, 061603 (2001);
E.F. Aguilera, J.J. Kolata, F.D. Becchetti, P.A. DeYoung, J.D. Hinnefeld, A. Horvath, L.O. Lamm, H.Y. Lee, D. Lizcano, E. Martinez-Quiroz, P. Mohr, T.W. O'Donnell, D.A. Roberts and **G. Rogachev**. "Elastic scattering and transfer in the $^6\text{He}+^{209}\text{Bi}$ system below the Coulomb barrier".
- Phys. Rev. C **64**, 051302 (2001);
G.V. Rogachev, V.Z. Goldberg, T. Lonnroth, W.H. Trzaska, S.A. Fayans, K.M. Kallman, J.J. Kolata, M. Mutterer, M.V. Rozhkov and B.B. Skorodumov. "Doubling of α -cluster states in ^{22}Ne ".
- Phys. Rev. C **64**, 061601 (2001);
G.V. Rogachev, J.J. Kolata, F.D. Becchetti, P.A. DeYoung, M. Hencheck, K. Helland, J.D. Hinnefeld, B. Hughey, P.L. Jolivet, L.M. Kiessel, H.Y. Lee, M.Y. Lee, T.W. O'Donnell, G.F. Peaslee, D. Peterson, D.A. Roberts, P. Santi and S.A. Shaheen. "Proton elastic scattering from ^7Be at low energies".
- Phys. of Atom. Nucl. **63**, 1518 (2000);
V.Z. Goldberg, **G.V. Rogachev**, M. Brenner, K.M. Kallman, T. Lonnroth, M.V. Rozhkov, S. Torilov, W.H. Trzaska and R. Wolski. "Observation of an alpha-cluster structure in ^{36}Ar "; Phys. of Atom. Nucl. **63**, 1518 (2000).
- Phys. Rev. C **62**, 034308 (2000);
K. Markenroth, L. Axelsson, S. Baxter, M.J.G. Borge, C. Donzau, S. Fayans, H.O.U. Fynbo, V.Z. Goldberg, S. Grevy, D. Guillemaud-Mueller, B. Jonson, K.M. Kallman, S. Leenhardt, M. Lewitowicz, T. Lonnroth, P. Manngard, I. Martel, A.C. Mueller, I. Mukha, T. Nilsson, G. Nyman, N.A. Orr, K. Riisager, **G.V. Rogachev**, M.G. Saint-Laurent, I.N. Serikov, N.B. Shul'gina, O. Sorlin, M. Steiner, O. Tengblad, M. Thoennessen, E. Tryggstad, W.H. Trzaska, F. Wenander, J.S. Winfield and R. Wolski. "Crossing the dripline to ^{11}N using elastic resonance scattering".
- Phys. of Atom. Nucl. **62**, 166 (1999);
V.Z. Goldberg, M.S. Golovkov, **G.V. Rogachev**, S.P. Barrow, R.W. Zurmuhle, Z. Liu, D.R. Benton, Y. Miao, C. Lee, N.G. Wimer, J.T. Murgatroyd and X. Li. "Study of the reaction mechanism for $^{12}\text{C}(^{14}\text{N}, ^6\text{Li})$ by angular-correlation measurement".
- JETP Letters **67**, 1013 (1998);
V.Z. Gol'dberg, **G.V. Rogachev**, M.S. Golovkov, V.I. Dukhanov, I.N. Serikov and V.A. Timofeev. "Study of the proton-rich nucleus ^8B in the resonance scattering of radioactive ^7Be by hydrogen".
- Phys. of Atom. Nucl. **60**, 1061 (1997);
V.Z. Goldberg, V.I. Dukhanov, A.E. Pakhomov, **G.V. Rogachev**, I.N. Serikov, V.A. Timofeev, M. Brenner, K.M. Kallmann, T. Lonnroth, P. Manngard, L. Axelsson, K.

Markenroth, W.H. Trzaska and R. Wolski. “Highly lying alpha-cluster states in the light nuclei ^{16}O , ^{20}Ne , ^{22}Ne , and ^{24}Mg ”.

- Phys. Rev. C **54**, R1511 (1996);
L. Axelsson, M.J.G. Borge, S. Fayans, V.Z. Goldberg, S. Grevy, D. Guillemaud-Mueller, B. Jonson, K.M. Kallman, T. Lonnroth, M. Lewitowicz, P. Manngard, K. Markenroth, I. Martel, A.C. Mueller, I. Mukha, T. Nilsson, G. Nyman, N.A. Orr, K. Riisager, **G.V. Rogachev**, M.G. Saint-Laurent, I.N. Serikov, O. Sorlin, O. Tengblad, F. Wenander, J.S. Winfield and R. Wolski. “Study of the unbound nucleus ^{11}N by elastic resonance scattering”.

Conference Proceedings

- J. of Phys. Conf. Ser. **665**, 012013 (2016);
M. La Cognata, C. Spitaleri, O. Trippella, G.G. Kiss, **G.V. Rogachev**, A.M. Mukhamedzhanov, M. Avila, G.L. Guardo, E. Koshchiy, A. Kuchera, L. Lamia, S.M.R. Puglia, S. Romano, D. Santiago and R. Sparta. “Reaction rate of the $^{13}\text{C}(\alpha, n)^{16}\text{O}$ neutron source using the ANC of the -3 keV resonance measured with the THM”; Nuclear Physics in Astrophysics VI (NPA6).
- Euro. J. Phys. Web of Conf. **86**, 00023 (2015);
M. La Cognata, C. Spitaleri, O. Trippella, G.G. Kiss, **G.V. Rogachev**, A.M. Mukhamedzhanov, M. Avila, G.L. Guardo, E. Koshchiy, A. Kuchera, L. Lamia, S.M.R. Puglia, S. Romano, D. Santiago and R. Sparta. “Measurement of sub threshold resonance contributions to fusion reactions: the case of the $^{13}\text{C}(\alpha, n)^{16}\text{O}$ astrophysical neutron source”; VI International Conference - Fusion 14.
- Acta Phys. Pol. B **45**, 309 (2014);
V.Z. Goldberg, **G.V. Rogachev** and R.E. Tribble. “Test of Modern Theoretical Approaches using Modern Experimental Methods.”; 33rd Mazurian Lakes Conference on Physics.
- Euro. J. Phys. Web of Conf. **66**, 07010 (2014);
M. La Cognata, C. Spitaleri, O. Trippella, G.G. Kiss, **G.V. Rogachev**, A.M. Mukhamedzhanov, M. Avila, G.L. Guardo, E. Koshchiy, A. Kuchera, L. Lamia, S.M.R. Puglia, S. Romano, D. Santiago and R. Sparta. “Measurement of the $^{13}\text{C}(\alpha, n)^{16}\text{O}$ reaction at astrophysical energies using the Trojan Horse Method. Focus on the -3 keV sub-threshold resonance.”; INPC 2013 - International Nuclear Physics Conference.
- AIP Conf. Proc. **1594**, 206 (2014);
M. La Cognata, C. Spitaleri, O. Trippella, G.G. Kiss, **G.V. Rogachev**, A.M. Mukhamedzhanov, M. Avila, G.L. Guardo, E. Koshchiy, A. Kuchera, L. Lamia, S.M.R. Puglia, S. Romano, D. Santiago and R. Sparta. “Measurement of the $^{13}\text{C}(\alpha, n)^{16}\text{O}$ reaction with the Trojan Horse Method: focus on the sub-threshold resonance at -3 keV”; Origin of Matter and Evolution of Galaxies 2013.
- J. of Phys. Conf. Ser. **569**, 012004 (2014);
G.V. Rogachev, M.L. Avila, A.N. Kuchera, L.T. Baby, J. Belarge, J. Blackmon, V.Z. Goldberg, E.D. Johnson, K.W. Kemper, E. Koshchiy, L. Linhardt, K. Marcon, D.

Santiago-Gonzalez and I. Wiedenhoever. “Clustering in non-self-conjugate nuclei ^{10}Be and ^{18}O ”; 3rd International Workshop on State of the Art in Nuclear Cluster Physics.

- AIP Conf. Proc. **1595**, 214 (2014);
O. Trippella, M. Busso, M. La Cognata, C. Spitaleri, G.G. Kiss, **G.V. Rogachev**, A.M. Mukhamedzhanov, M. Avila, G.L. Guardo, E. Koshchiy, A. Kuchera, L. Lamia, E. Maiorca, S. Palmerini, S.M.R. Puglia, S. Romano, D. Santiago and R. Sparta. “The $^{13}\text{C}(\alpha, n)^{16}\text{O}$ reaction as a neutron source for the s-process in AGB low-mass stars.”; 7th European Summer School on Experimental Nuclear Astrophysics.
- J. of Phys. Conf. Ser. **436**, UNSP 012041 (2013);
G.V. Rogachev, L. Baby, J. Belarge, J.C. Blackmon, V.Z. Goldberg, E.D. Johnson, E. Koshchiy, A.N. Kuchera, J. Lai, L. Linhardt, K. Macon, M. Matos, D. Santiago-Gonzalez and I. Wiedenhoever. “Clustering in A=10 nuclei”; 10th International Conference on Clustering Aspects of Nuclear Structure and Dynamics (Cluster’12).
- Proc. of 5th International Conf. on Fission and Properties of Neutron-Rich Nuclei, 144 (2013);
I. Wiedenhoever, L.T. Baby, D. Santiago-Gonzalez, A. Rojas, J.C. Blackmon, **G.V. Rogachev**, J. Belarge, E. Koshchiy, A.N. Kuchera, L.E. Linhardt, J. Lail, K.T. Macon, M. Matos and B.C. Rascol. “Studies of Exotic Nuclei at the RESOLUT Facility of Florida State University”; 5th International Conf. on Fission and Properties of Neutron-Rich Nuclei.
- AIP Conf. Proc. **1524**, 58 (2013);
G.V. Rogachev, M. Avila, L.T. Baby, J. Blackmon, V.Z. Goldberg, E.D. Johnson, M. Matos, K. Macon, J.P. Mitchell, L. Linhardt, A. Kuchera, E. Koshchiy, K. Kemper, D. Santiago-Gonzales, A. Volya and I. Wiedenhoever. ”Structure of light nuclei in resonance scattering experiments”; International Conference on Recent Trends in Nuclear Physics-2012 (ICRTNP-2012).
- J. of Phys. Conf. Ser. **337**, 012008 (2012);
V.Z. Goldberg, B.T. Roeder, **G.V. Rogachev**, G.G. Chubarian, E.D. Johnson, C. Fu, A.A. Alharbi, M.L. Avila, A. Banu, M. McCleskey, J.P. Mitchell, E. Simmons, G. Tabacaru, L. Trache and R.E. Tribble. “Resonance Scattering to Study Exotic Nuclei at the Limits of Stability”; Nuclear Physics in Astrophysics V.
- AIP Conf. Proc. **1491** 121 (2012);
V.Z. Goldberg and **G.V. Rogachev**. “ α -Cluster States in N not equal Z Nuclei”; Nuclear Structure and Dynamics ’12.
- AIP Conf. Proc. **1498**, 218 (2012);
M. La Cognata, C. Spitaleri, O. Trippella, G.G. Kiss, **G.V. Rogachev**, A.M. Mukhamedzhanov, M. Avila, G.L. Guardo, E. Koshchiy, A. Kuchera, L. Lamia, S.M.R. Puglia, S. Romano, D. Santiago and R. Sparta. “Measurement of the-3 keV resonance in the $^{13}\text{C}(\alpha, n)^{16}\text{O}$ reaction and its influence on the synthesis of s-process nuclei”; Exotic Nuclei and Nuclear/particle Astrophysics (IV): from Nuclei to Stars.

- J. of Phys. Conf. Ser. **403**, 012036 (2012);
L.E. Linhardt, L. Baby, D.W. Bardayan, J.C. Blackmon, H. Gardiner, E. Johnson, E. Koschiy, K.T. Macon, M. Matos, B.C. Rasco, **G. Rogachev**, D. Santiago-Gonzalez and I. Wiedenhoever. “Measurement of $^{17}\text{F}+p$ reactions with ANASEN”; HITES 2012: Horizons of Innovative Theories, Experiments, and Supercomputing in Nuclear Physics.
- AIP Conf. Proc. **1498**, 349 (2012);
L.E. Linhardt, L. Baby, D.W. Bardayan, J.C. Blackmon, H. Gardiner, E. Johnson, E. Koschiy, K.T. Macon, B.C. Rasco, **G. Rogachev**, D. Santiago-Gonzalez and I. Wiedenhoever. “Measurement of $^{17}\text{F}+p$ Reactions At RESOLUT”; Exotic Nuclei and Nuclear/particle Astrophysics (IV): from Nuclei to Stars.
- Prog. of Theor. Phys. Suppl. **196**, 184 (2012);
G.V. Rogachev, M. Avila, S. Cherubini, V.Z. Goldberg, M. Gulino, E.D. Johnson, A.N. Kuchera, M. La Cognata, L. Lamia, S. Romano, L.E. Miller, R.G. Pizzone, G.G. Rapisarda, M.L. Sergi, C. Spitaleri, R.E. Tribble, W.H. Trzaska and A. Tumino. “Clustering in Non-Self-Conjugate Nuclei”; Frontier Issues in Physics of Exotic Nuclei - YKIS2011.
- J. of Phys. Conf. Ser. **205**, 012011 (2010);
E.D. Johnson, **G.V. Rogachev**, V.Z. Goldberg, S. Brown, D. Robson, A.M. Crisp, P.D. Cottle, C. Fu, J. Giles, B.W. Green, K.W. Kemper, K. Lee, B.T. Roeder and R.E. Tribble. “Clustering in N not equal Z nuclei.”; XVIII International School on Nuclear Physics, Neutron Physics and Applications.
- AIP Conf. Proc. **1213**, 137 (2010);
G.V. Rogachev, E.D. Johnson, J. Mitchell, V.Z. Goldberg, K.W. Kemper and I. Wiedenhoever. ”Resonance scattering and alpha-transfer reactions for nuclear astrophysics”; Fifth European Summer School on Experimental Nuclear Astrophysics.
- AIP Conf. Proc. **1098**, 213 (2009);
V.Z. Goldberg, **G.V. Rogachev**, E.D. Johnson, S. Brown, L.E. Miller, T. Al-Abdullah, S. Cherubini, G.G. Chubarian, C. Fu, M. Gulino, B. Green, J. Hardy, K. Kemper, M. La Cognata, M. Lattuada, A. Mukhamedzhanov, J. Mitchell, O. Momotyuk, M. McCleskey, R.G. Pizzone, S. Romano, B. Roeder, B. Skorodumov, C. Spitaleri, G. Tabacaru, L. Trache, R.E. Tribble, W.H. Trzaska, A. Tumino and Y. Zhai. ” α -cluster structure in light N not equal Z nuclei”; International Conference on New Aspects of Heavy Ion Collisions Near the Coulomb Barrier - Fusion 08.
- AIP Conf. Proc. **1005**, 144 (2008);
C. Fu, V.Z. Goldberg, A.M. Mukhamedzhanov, G.G. Chubarian, **G.V. Rogachev**, B. Skorodumov, M. McCleskey, Y. Zhai, T. Al-Abdullah, G. Tabacaru, L. Trache and R.E. Tribble. “Proton decay of ^{18}Ne states populated in the O-14+alpha resonance interaction”; Compound-Nuclear Reactions and Related Topics.
- Nucl. Phys. A **787**, 321C (2007);
A.M. Mukhamedzhanov, L.D. Blokhintsev, S. Brown, V. Burjan, S. Cherubini, V.Z.

- Goldberg, M. Gulino, B.F. Irgaziev, E. Johnson, K. Kemper, V. Kroha, M. La Cognata, L. Lamia, A. Momotyuk, R.G. Pizzone, B. Roeder, **G. Rogachev**, S. Romano, C. Spitaleri, R.E. Tribble and A. Tumino. “Indirect techniques in nuclear astrophysics. Asymptotic normalization coefficient and Trojan Horse.”. 9th International Conference on Nucleus-Nucleus Collisions 2006.
- Rev. Mex. De Fis. **52**, 41 (2006);
E.F. Aguilera, E. Martinez-Quiroz, H. Garcia-Martinez, D. Lizcano, J.J. Kolata, L.O. Lamm, **G. Rogachev**, P.A. DeYoung, C. Guess, U. Khadka, P.J. Mears, F.D. Becchetti, Y. Chen, H. Jiang, J.D. Hinnefeld and G.F. Peaslee. “Protons from ${}^8\text{B}+{}^{58}\text{Ni}$ ”. 28th Symposium on Nuclear Physics.
 - AIP Conf. Proc. **847**, 255 (2006);
A.A. Mukhamedzhanov, **G. Rogachev**, L.D. Blokhintsev, S. Brown, V. Burjan, S. Cherubini, V.Z. Gol’dberg, B.F. Irgaziev, E. Johnson, K. Kemper, V. Kroha, A. Momotyuk, R.G. Pizzone, B. Roeder, S. Romano, C. Spitaleri, R.E. Tribble and A. Tumino. “Indirect techniques in nuclear astrophysics”; Origin of Matter and Evolution of Galaxies.
 - AIP Conf. Proc. **819**, 601 (2006);
B.B. Skorodumov, **G.V. Rogachev**, R. Boutachkov, A. Aprahamian, J.J. Kolata, L.O. Lamm, M. Quinn and A. Woehr. “Spectroscopic structure of exotic ${}^{19}\text{Na}$ - Astrophysics implication”; Capture Gamma-Ray Spectroscopy and Related Topics.
 - Nucl. Inst. & Meth. in Phys. Res. B **241**, 977 (2005);
G.V. Rogachev, A.A. Aprahamian, F.D. Becchetti, P. Boutachkov, Y. Chen, G. Chubarian, P.A. DeYoung, A. Fomichev, V.Z. Goldberg, M.S. Golovkov, J.J. Kolata, Y.T. Oganessian, G.F. Peaslee, M. Quinn, A. Rodin, B.B. Skorodumov, R.S. Slepnev, G. Ter-Akopian, W.H. Trzaska, A. Woehr and R. Wolski. “Isobaric analog states as a tool for spectroscopy of exotic nuclei”. 18th International Conference on Application of Accelerators in Research and Industry (CAARI).
 - Rev. Mex. De Fis. **50**, 1 (2004);
E.F. Aguilera, E. Martinez-Quiroz, H. Garcia-Martinez, A. Gomez-Camacho, J.J. Kolata, **G. Rogachev**, P.A. DeYoung, G.F. Peaslee, P. Mears, F.D. Becchetti, J.H. Lupton, Y. Chen and J.D. Hinnefeld. “Fusion of the ${}^8\text{Li}+{}^{208}\text{Pb}$ system at near-barrier energies studied via xn evaporation”. 27th Symposium on Nuclear Physics.
 - Nucl. Phys. A **746**, 229C (2004);
G.V. Rogachev, A. Aprahamian, F.D. Becchetti, P. Boutachkov, Y. Chen, G. Chubarian, P.A. DeYoung, A. Fomichev, V.Z. Goldberg, M.S. Golovkov, J.J. Kolata, Y.T. Oganessian, G.F. Peaslee, M. Quinn, A. Rodin, B.B. Skorodumov, R.S. Slepnev, G. Ter-Akopian, W.H. Trzaska, A. Woehr and R. Wolski. “Structure of exotic ${}^7\text{He}$ and ${}^9\text{He}$ ”. 6th International Conference on Radioactive Nuclear Beams.
 - Nucl. Inst. & Meth. in Phys. Res. A **505**, 377 (2003);
F.D. Becchetti, M.Y. Lee, T.W. O’Donnell, D.A. Roberts, J.J. Kolata, L.O. Lamm, **G. Rogachev**, V. Guimaraes, P.A. DeYoung and S. Vincent. “The TwinSol low-energy

radioactive nuclear beam apparatus: status and recent results”. 10th Symposium on Radiation Measurements and Applications Location.

- Rev. Mex. De Fis. **49**, 124 (2003);
V.Z. Goldberg, W.H. Trzaska, **G. Rogachev**, J.J. Kolata, A. Andreev, C. Angulo, M.J.G. Borge, S. Cherubini, G.G. Chubarian, G. Crowley, A. Fomichev, M. Gorska, M. Guliano, M.S. Golovkov, M. Huyse, K.M. Kallman, M. Lattuada, T. Lonroth, M. Mutterer, Y.T. Oganessian, R. Raabe, A. Rodin, S. Romano, M. Rozhkov, B.B. Skorodumov, R.S. Slepnev, C. Spitaleri, O. Tengblad, G.M. Ter-Akopian, A. Tumino, P. Van Duppen and R. Wolski. “Recent results in the studies of nuclear structure by resonance scattering with radioactive beams”. 26th Symposium on Nuclear Physics.
- Acta Phys. Hung. New Ser. **18**, 215 (2003);
V.Z. Goldberg, W.H. Trzaska, **G.V. Rogachev**, J.J. Kolata, A. Andreyev, C. Angulo, M.J.G. Borge, S. Cherubini, G. Chubarian, G. Crowley, A.S. Fomichev, M. Gorska, M. Gulino, M.S. Golovkov, M. Huyse, K.M. Kallman, M. Lattuada, T. Lonroth, M. Mutterer, R. Raabe, A.M. Rodin, S. Romano, M.V. Rozhkov, B.B. Skorodumov, C. Spitaleri, O. Tengblad, G.M. Ter-Akopian, A. Tumino, P. Van Duppen and R. Wolski. ”New perspectives in the studies of resonance scattering”. Symposium on Nuclear Clusters: From Light Exotic to Superheavy Nuclei.
- Nucl. Phys. A **722**, 341C (2003);
V. Guimaraes, R. Kuramoto, R. Lichtenthaler, G. Amadio, E. Benjamin, P.N. de Faria, A. Lepine-Szily, G.F. Lima, J.J. Kolata, **G. Rogachev**, F.D. Becchetti, T. O’Donnell, Y. Chen, J. Hinnefeld and J. Lapton. “Searching for resonances in the unbound ${}^6\text{Be}$ and ${}^5\text{Li}$ nuclei”; International Symposium on Physics of Unstable Nuclei (ISPUN 02).
- Rev. Mex. De Fis. **47**, 78 (2001);
D. Lizcano, E.F. Aguilera, E. Martinez-Quiroz, J.J. Kolata, **G. Rogachev**, H.Y. Lee, L.O. Lamm, A. Horvath, F. Becchetti, T. O’Donnell, D. Roberts, P.A. DeYoung and J.D. Hinnefeld. “Reaction cross sections for ${}^6\text{He}+{}^{209}\text{Bi}$ below the Coulomb barrier”; Revista Mexicana De Fisica **47**, 78 (2001). 24th Symposium on Nuclear Physics.
- Proc. of 49th International Conference on Nuclear Spectroscopy and Nuclear Structure, 397 (2000);
Y.A. Glukhov, A.S. Dem’yanova, S.A. Goncharov, R. Julin, D.T. Khoa, A.A. Ogloblin, **G.V. Rogachev**, M.V. Rozhkov, V.P. Rudakov, G.R. Satchler, W.H. Trzaska and G.P. Turin. “Rainbow scattering in ${}^{16}\text{O}+{}^{12}\text{C}$ system”; 397 (2000). 49th International Conference on Nuclear Spectroscopy and Nuclear Structure.
- Proc. of the 7th Int. Conf. on Clustering Aspects of Nuclear Structure and Dynamics, 170 (2000);
T. Lonroth, V.Z. Goldberg, M. Guttormsen, E. Indola, K.M. Kallman, R. Liotta, E. Melby, **G.V. Rogachev**, M.V. Rozhkov, A. Schiller, T. Siiskonen, S. Torilov, W.H. Trzaska and R. Wolski. “New observation methods for alpha-particle elastic scattering. Microscopic properties of alpha-cluster states”; 170 (2000).
- Proc. of European Conference on Advances in Nuclear Physics and Related Areas, 640 (1999);

V.Z. Goldberg, L. Axelsson, M. Brenner, V.I. Dukhanov, K.M. Kallmann, T. Lonroth, P. Manngard, K. Markenroth, A.E. Pakhomov, **G.V. Rogachev**, M.V. Rozhkov, I.N. Serikov, W.H. Trzaska and R. Wolski. “Excitation function for elastic scattering of ^{16}O , ^{20}Ne , ^{22}Ne , ^{24}Mg and ^{36}Ar nuclei at 180 degrees”. European Conference on Advances in Nuclear Physics and Related Areas.

- Proc. of European Conference on Advances in Nuclear Physics and Related Areas, 726 (1999);
G.V. Rogachev, V.Z. Goldberg, M.S. Golovkov, A.E. Pakhomov, V.A. Timofeev and I.N. Serikov. “Study of proton rich ^8B nuclei by elastic resonance scattering of radioactive ^7Be on hydrogen”; European Conference on Advances in Nuclear Physics and Related Areas.
- AIP Conf. Proc. **455**, 260 (1998);
L. Axelsson, K. Markenroth, M.J.G. Borge, S. Fayans, V.Z. Goldberg, S. Grevy, D. Guillemaud-Mueller, B. Jonson, K.M. Kallman, T. Lonroth, M. Lewitowicz, P. Manngard, I. Martel, A.C. Mueller, I. Mukha, T. Nilsson, G. Nyman, N.A. Orr, K. Riisager, **G.V. Rogachev**, M.G. Saint-Laurent, I.N. Serikov, O. Sorlin, O. Tengblad, F. Wenander, J.S. Winfield and R. Wolski. “Visualizing ^{11}N by resonance reactions”. ENAM 98: Exotic Nuclei and Atomic Masses.
- Acta Phys. Hun. New Ser. **7**, 355 (1998);
M. Brenner, E. Indola, K.M. Kallman, T. Lonroth, P. Manngard, M. Halldorsdottir, T. Karlsson, Z. Mate, L. Zolnai, V.Z. Goldberg, **G.V. Rogachev**, M.V. Rojkov, I.N. Serikov, W. Trzaska and R. Wolski. “Energy-spin relations of mid-sd-shell nuclear states - α cluster effect”; 2nd Latin American Workshop on Nuclear and Heavy Ion Physics.

Invited Presentations

- “Stable and Radioactive Ion Beams at Texas A&M University”;
Low Energy Nuclear Physics community workshop, August 2016, Notre Dame, IN, USA.
- “Quantifying clustering near α -threshold”;
 11^{th} International Conference on Clustering Aspects of Nuclear Structure and Dynamics, May 2016, Naples, Italy.
- “Structure of light exotic nuclei and clustering phenomena studied through the unbound states with ReA3”;
ReA3 workshop at 2015 Low Energy Nuclear Physics community meeting, Aug. 2015, East Lansing, MI, USA.
- “Constraining the key α -capture astrophysical reaction rates using the sub-Coulomb α -transfer reactions”;
Conference on Nucleus-Nucleus Collision 2015, Jun. 2015, Catania, Italy.
- “Light Exotic Nuclei Studied via Resonance Scattering”;
Congress of Canadian Association of Physicists, Jun. 2015, Edmonton, Alberta, Canada.

- “Astrophysical Aspects of Clusters in Oxygen Isotopes”;
Gordon Research Conference on nuclear chemistry, Jun. 2015, New London, New Hampshire.
- “Clustering in non-self-conjugate nuclei ^{10}Be and ^{18}O ”;
3rd Workshop on State of the Art in Nuclear Clusters Physics, May 2014, Yokohama, Japan.
- “Measurement of $p+^7\text{Be}$ elastic and inelastic excitation functions”;
RIKEN Workshop on “Inelastic excitations in thick target inverse kinematics approach resonance”, May 2014, Waco, Japan.
- “Recent Progress in Exotic nuclei Studies using Resonance Scattering”.
VII International Symposium on Exotic Nuclei EXON2014. Sep. 2014, Kaliningrad, Russian Federation.
- “Introductory Experimental Nuclear Astrophysics”;
Lecture series at the 7th European Summer School on Experimental Nuclear Astrophysics, Sep. 2013, Catania, Italy.
- “Nuclear Reactions”;
Lecture series at the Exotic Beams Summer School, Jul. 2013, LBNL, Berkeley, US.
- “Exploring the lightest nuclei with resonance scattering”;
Workshop on *ab initio* description of atomic nucleus, Dec. 2012, Birmingham, UK.
- “Structure of light nuclei in resonance scattering experiments”;
International Conference on Recent Advances in Nuclear Physics, Nov. 2012, Barotiwala, India.
- “Clustering in non-self-conjugate nuclei”;
Symposium on Frontier Issues in Physics of Exotic Nuclei, Oct. 2011, Kyoto, Japan.
- “Detectors for experimental nuclear astrophysics”;
6th European Summer School on Experimental Nuclear Astrophysics, Sep. 2011, Catania, Italy.
- “ α -clustering in light non-self-conjugate nuclei”;
Continuum and Correlations in Light Nuclei, Jun. 2011, Trento, Italy.
- “Extremely clustered continuum α -halo states in light nuclei”;
III Workshop on Nuclei and Mesoscopic physics (WNMP2011), Mar. 2011, East Lansing, USA.
- “Structure of light exotic nuclei in resonance scattering”;
Workshop on the “Limits of existence of Light nuclei”, Oct. 2010, Trento, Italy.
- “Resonance Scattering and α -transfer reactions for nuclear astrophysics”;
5th European Summer School on Experimental Nuclear Astrophysics, Sep. 2009, Santa Tecla, Sicily, Italy.

- “ α -halo in light nuclei”;
Gordon Research Conference, Nuclear Chemistry. “Frontiers Of Nuclear Structure Through Spectroscopy And Reactions”, Jun. 2009, New London, NH, USA.
- “Transfer and resonance reactions in the era of unstable beams at FRIB”;
RIA/FRIB Workshop, Argonne National Lab, May 2009, Chicago, Illinois, USA.
- “Spectroscopy of light exotic nuclei in resonance reactions”;
Meeting of Southern Section of American Physical Society (SESAPS). Oct. 2008, Raleigh, NC.
- “ANC technique and R-matrix analysis”;
Workshop on “AZURE- R-Matrix and Nuclear Reactions in stellar Hydrogen and Helium Burning”, Apr. 2008, Santa Fe, NM.
- “Sub-Coulomb α transfer reactions in Nuclear Astrophysics”;
Mini-symposium on Experimental Techniques in Low Energy Nuclear Astrophysics Studies. DNP 2006: 2006 Division of Nuclear Physics Annual Meeting, Oct. 2006, Nashville, Tennessee.
- “Structure of ^9C and ^7He . Resonance reactions with studies of light exotic nuclei”;
Meeting of American Physical Society (APS), Apr. 2006, Dallas, TX, USA.
- “Cluster configurations in non-self-conjugate nuclei”;
Presented at the SPIRAL2 Workshop on Nuclear Reactions. GANIL, Oct. 2005, Caen, France.
- “Recent advances in studies of exotic nuclei via resonance reactions.”;
CAARI 2004: 18th International Conference on the Application of Accelerators in Research and Industry. Oct. 2004, Denton, TX, USA.
- “The Structure of Exotic ^7He and ^9He ”;
6th International Radioactive Nuclear Beams Conference (RNB6). Sep. 2003, Argonne, IL, USA.
- “Low energy RNB measurements using the stopped beam technique”;
CAARI 17th International Conference on the Application of Accelerators in Research and Industry CAARI 2002, Nov. 2002, Denton, Texas, USA.

Colloquia and Seminars

- “Preliminary results of the S1264 experiment”;
TRIUMF, Jul 2014, Vancouver, Canada.
- “Understanding of nuclear structure and stellar processes through nuclear reactions”;
Colloquium at Texas A&M University, Apr. 2013, College Station, TX, USA.
- “Structure of exotic nuclei and understanding of the rp-process”;
Seminar at Texas A&M University, Apr. 2013, College Station, TX, USA.

- “ANASEN: Recent results and future directions”;
Colloquium at the Los Alamos National Laboratory, Jan. 2013, Los Alamos, NM, USA.
- “ANASEN: Recent results and future directions”;
Seminar at the University of York, Dec. 2012, York, UK.
- “ANASEN: Recent results and future directions”;
Seminar at the University of Notre Dame, Dec. 2012, Notre Dame, Indiana, USA.
- “ANASEN: Recent results and future directions”;
Seminar at the National Superconducting Cyclotron Laboratory, Michigan State University, Oct. 2012, East Lansing, USA.
- “Structure of light nuclei studied via resonance scattering”;
Colloquium at the Canada’s National Laboratory for Particle and Nuclear Physics (TRIUMF), University of British Columbia, British Columbia, Jul. 2011, Vancouver, Canada.
- “Extremely clustered continuum “alpha-halo” states in light nuclei”;
Colloquium at the National Superconducting Cyclotron Laboratory, Michigan State University, Mar. 2011, East Lansing, USA.
- “Structure of light exotic nuclei in resonance scattering”;
Seminar at Argonne National Laboratory, Mar. 2010, Argonne, IL, USA.
- “Nuclear Astrophysics and Indirect Experimental methods”;
Colloquium at Mississippi State University, Jan. 2010, Starkville, MS, USA.
- “First results with the new RNB facility RESOLUT and nuclear astrophysics with stable beams at FSU”;
Seminar at the University of Notre Dame, Apr. 2009, Notre Dame, IN, USA.
- “Resonances in Atomic Nuclei: From exotic nuclei to nuclear astrophysics”;
Colloquium at Florida State University, Feb. 2009, Tallahassee, FL, USA.
- “Nuclear Astrophysics with stable beams at FSU”;
Seminar at Michigan State University, Feb. 2008, East Lansing, MI, USA.
- “Spectroscopy of light exotic (and not so exotic) nuclei in resonance scattering”;
Seminar at Florida State University, Mar. 2007, Tallahassee, FL, USA.
- “Structure of light exotic nuclei in resonances elastic scattering”;
Nuclear Theory Journal Club at Florida State University, Sep. 2006, Tallahassee, FL, USA.
- “Resonance reactions as a tool for spectroscopy of exotic nuclei”;
Seminar at Michigan State University, Mar. 2005, East Lansing, Michigan, USA.
- “Resonance reactions with Rare Isotope Beams”;
Seminar at Florida State University, Mar. 2004, Tallahassee, Florida, USA.

- “Recent studies of exotic structures in light nuclei”;
Seminar at University of Notre Dame, Apr. 2002, Notre Dame, IN, USA.
- “Application of RNB for spectroscopy studies of light exotic nuclei”;
Seminar at Texas A&M University, Nov. 2002, College Station, Texas, USA.
- “Study of proton rich nuclei ^8B and ^{11}N via resonance elastic scattering”;
Seminar at the University of Notre Dame, Nov. 2000, Notre Dame, IN, USA.
- “Exotica in resonance scattering”;
Seminar at the Russian Research Centre “Kurchatov Institute”, Apr. 1999, Moscow, Russia.

Oral Presentations

- “Texas Active Target (TexAT)”;
Low Energy Nuclear Physics community workshop, August 2016, Notre Dame, IN, USA.
- “Recent experience with ReA3 beam time structure”;
Low Energy Nuclear Physics community workshop, August 2016, Notre Dame, IN, USA.
- “Nuclear Structure Beyond the drip-line: ^9He and ^{10}N ”;
Workshop on Direct Reactions with Exotic Beams 2016. July 2016, Halifax, Canada.
- “Statistical Problems in Track Detectors”;
Texas A&M University College of Science “Big Data” workshop, Jan. 2016, College Station, TX, USA.
- “TexAT - Texas Active Target detector”;
Big data workshop at the Cyclotron Institute, Texas A&M University, Dec. 2015, College Station, TX, USA.
- “CNS at the TAMU cyclotron facility”;
MINER collaboration workshop, Texas A&M University, Nov. 2015, College Station, TX, USA.
- “Opportunities with TexAT at AIRIS”;
AIRIS workshop at 2015 Low Energy Nuclear Physics community meeting, Aug. 2015, East Lansing, MI, USA.
- “Nuclear Structure with stable and Rare Isotope Beams at TAMU”;
The meeting of the US Low Energy Nuclear Physics community. Preparation of the White Paper for the US Long Range Plan of nuclear physics research. Aug. 2014, College Station, Texas, USA.
- “Exploring reaction rates near $A=30$ ”;
The meeting of the US Low Energy Nuclear Physics community. Preparation of the White Paper for the US Long Range Plan of nuclear physics research. Aug. 2014, College Station, Texas, USA.

- “Indirect methods with stable beams”;
The meeting of the US Low Energy Nuclear Physics community. Preparation of the White Paper for the US Long Range Plan of nuclear physics research. Aug. 2014, College Station, Texas, USA.
- Summary of Working group “Stable and γ beams, stars, stellar burning, Big Bang, Sun”;
The meeting of the US Low Energy Nuclear Physics community. Preparation of the White Paper for the US Long Range Plan of nuclear physics research. Aug. 2014, College Station, Texas, USA.
- “Clustering in $A=10$ nuclei”;
10th International Conference on Clustering Aspects of Nuclear Structure and Dynamics, Sep. 2012, Debrecen, Hungary.
- “The First Experiments with ANASEN”;
2nd European Nuclear Physics Conference 2012, Sep. 2012, Bucharest, Romania.
- “The First Experiments with ANASEN”;
International Conference of Nuclear Structure 2012, Aug. 2012, Argonne, Illinois, USA.
- “Array for Nuclear Astrophysics Studies with exotic nuclei (ANASEN)”;
Workshop on Advances in Nuclear Radiation Detectors and Technologies, Jan. 2011, New Brunswick, New Jersey, USA.
- “Reactions for Nuclear Astrophysics”;
FRIB Instrumentation workshop, Feb. 2010, East Lansing, Michigan, USA.
- Plenary report on “Silicon Arrays workgroup discussion”;
FRIB Instrumentation workshop, Feb. 2010, East Lansing, Michigan, USA.
- “Clustering phenomena in light $N \neq Z$ nuclei”;
COMEX3: Collective Motions in Nuclei under Extreme Conditions, Jun. 2009, Mackinac Island, Michigan, USA.
- “Study of light exotic nuclei through resonance reactions with RNB’s”;
RNB8: 8th International Conference on Radioactive Nuclear Beams, May 2009, Grand Rapids, Michigan, USA.
- “Spectroscopy of light exotic nuclei using resonance scattering in inverse kinematics”;
DREB2007: The V International Workshop on Direct Reactions with Exotic Beams, Jun. 2007 Wako, Japan.
- “Indirect Techniques in Nuclear Astrophysics”;
INPC2007: International Nuclear Physics Conference, Jun 2007, Tokyo, Japan.
- “ α - cluster states in ^{18}O ”;
DREB2005: The IV International Workshop on Direct Reactions with Exotic Beams, Jun. 2005, East Lansing, Michigan.

- “Structure of Heavy Helium Isotopes via the isobaric analog states in Lithium”;
DNP 2003: Fall Meeting of the APS Division of Nuclear Physics, Oct. 2003, Tucson, Arizona, USA.
- “Investigation of α -cluster structure of ^{22}Ne and ^{22}Mg ”;
EXON 2001: International Symposium on Exotic Nuclei, Jul 2001, Listvyanka, Russia.
- “Recent Results from the TWINSOL Radioactive Nuclear Beam Facility”;
CAARI 2000: International Conference on the Application of Accelerators in Research and Industry, Nov. 2000, Denton, Texas, USA.
- “Study of proton rich nucleus ^8B in resonance interaction of radioactive ^7Be with Hydrogen”;
Joint Study Weekend HALO’98, Apr. 1998, Lisbon, Portugal.
- “Study of proton rich ^{11}N and ^8B nuclei by elastic resonance scattering”;
Euro. Conf. on: “Advances In Nuclear Physics and Related Areas”, Jul. 1997, Thessaloniki, Greece.
- “Search of α -Cluster States of Light Nuclei at High Excitation Energies”;
1996 International Conf. on Nuclear Spectroscopy and Nuclear Structure, Jun. 1996, Moscow, Russia.

Poster Presentations

- “Experiments with Array for Nuclear Astrophysics and Structure with Exotic Nuclei (ANASEN)”;
2nd Conference on Advances in Radioactive Isotope Science, Jun. 2014, Tokyo, Japan.
- “Spectroscopy of light exotic nuclei in resonance scattering”;
INPC2007: International Nuclear Physics Conference, Jun. 2007, Tokyo, Japan.
- “Application of Resonance Reactions for spectroscopy studies of exotic nuclei”;
Limits2004: Conference on “Nuclei at the Limits”, Jul. 2004, Chicago, IL, USA.
- “In quest of a ^3H excited state”;
RNB6: 6th Conference on Radioactive Nuclear Beams, Sep. 2003, Argonne, IL, USA.
- “Structure of ^9He nucleus via the isobaric analog states in ^9Li ”;
RNB6: 6th Conference on Radioactive Nuclear Beams, Sep. 2003, Argonne, IL, USA.
- “Investigation of ^8B structure at low excitation energies”;
ENAM 2001: 3rd International Conference on Exotic Nuclei and Atomic Masses, Jul. 2001, Hämeenlinna, Finland.
- “Reaction mechanism for $^{12}\text{C}(^{14}\text{N}, ^6\text{Li})$ reaction”;
European Conf. on: “Advances In Nuclear Physics and Related Areas”, Jul. 1997, Thessaloniki, Greece.

Grants

- S. Tabor, P. Cottle, V. Crede, P. Eugenio, A. Frawley, K. Kemper, M. Riley, **G.V. Rogachev**, I. Wiedenhöver.
“Experimental nuclear physics program at FSU”;
National Science Foundation. (Jun. 2005 - May 2008.) Total award **\$3,500,000**.
- S. Tabor, P. Cottle, V. Crede, A. Frawley, M. Riley, **G.V. Rogachev**, I. Wiedenhöver.
Experimental nuclear physics program at FSU”;
National Science Foundation. (Jun. 2008 - May 2011.) Total award **\$4,500,000**.
- **G. Rogachev**, I. Wiedenhöver, J. Blackmon (LSU).
“Major Research Instrumentation (MRI): Development of the Array for Nuclear Astrophysics Studies with Exotic Beams”;
National Science Foundation. (Sep. 2008 - Aug. 2012.) Total award **\$720,000**.
- S. Tabor, P. Cottle, A. Frawley, M. Riley, **G.V. Rogachev** and I. Wiedenhöver.
“Experimental nuclear physics program at FSU”;
National Science Foundation. (Sep. 2011 - Aug. 2014.) Total award **\$5,500,000**.
- R.E. Tribble, C. Gagliardi, J.C. Hardy, C.M. Folden, D.H. Youngblood, **G.V. Rogachev**, J.B. Natowitz, S.J. Yennello, D. Melconian.
“Experimental nuclear physics at Cyclotron Institute”;
Department of Energy. (Jan. 2014 - Dec. 2016.) Total award **\$10,000,000**.
- **G.V. Rogachev**.
”Origin of Chemical Elements in the Universe”;
The Welch Foundation. (Jun. 2014 - May 2017) Total award **\$180,000**.

Teaching

Courses Taught

U of Notre Dame	General Physics B, Electricity and Magnetism
Florida State U	General Physics A, Newtonian Mechanics
Florida State U	General Physics B, Electricity and Magnetism
Florida State U	General Physics A Studio, Newtonian Mechanics Studio
Florida State U	Planets, Stars and Galaxies. Introduction to Astronomy
Florida State U	Particle and Nuclear Physics
Florida State U	Inquiry based methods in physics education (Grad.)
Florida State U	Nuclear Astrophysics, R-matrix (Grad.)
Texas A&M U	General Physics B, UF Electricity, Magnetism and Optics
Texas A&M U	General Physics A, UF Newtonian Mechanics

Supervisor of Postdoctoral Research Associates

Eric Johnson	2008 - 2009	FSU
Evgeniy Koshchiy	2009 - 2013	FSU
Ethan Uberseder	2014 - 2016	TAMU
Shadi Bedoor	2015 - present	TAMU

Supervisor of Doctoral Dissertations

Name	Grad. year	Dissertation Title	Institution
Eric Johnson	2008	“The cluster structure of oxygen isotopes”	FSU
Joseph Mitchell	2012	“Thermonuclear flashes on H/He accreting CO white dwarfs and structure of exotic nuclei”	FSU
Melina Avila	2013	“Clustering in ^{18}O and ANC measurements using ($^6\text{Li},d$) reactions”	FSU
Anthony Kuchera	2013	“Clustering phenomena in $A=10$ $T=1$ nuclear systems”	FSU
Joshua Hooker	exp. 2018		TAMU
Heshani Jayatissa	exp. 2019		TAMU
Shriteja Upadhyayula	exp. 2020		TAMU
Curtis Hunt	exp. 2020		TAMU
Cordero Magana	exp. 2021		TAMU

Doctoral Dissertation Committees

Tony Sumaryada	2007	FSU
Aaron Aguilar	2008	FSU
Edgar Carrera	2008	FSU
Thomas DeVore	2008	FSU
Patrick Peplowski	2009	FSU
Calem Hoffman	2009	FSU
Rifat Fatema	2009	FSU
Ashwani Kumar	2009	FSU
Sean Barton	2011	FSU
Alexander Rojas	2011	FSU
Sergey Gleizher	2011	FSU
Peter Bender	2011	FSU
Volha Abramkina	2011	FSU
Benjamin Conner	2011	FSU
Farrukh Fattoyev	2011	FSU
Robert Penney	2011	FSU
Sanhita Ghosh	2012	FSU
Dmitriy Mayorov	2015	TAMU

Supervisor of Master's Thesis

Simon Brown 2006 “ α -cluster structure in ^{18}O ” U of Surrey (exchange student)

Supervisor of Bachelor's Thesis

Alex Long	2009	“Calibration Methods of the Neutron Detector at Florida State University” (Honors)	FSU
John Carpino	2009	“The Building and testing of the Array for Nuclear Astrophysics Studies with Exotic Nuclei (ANASEN)”	FSU
Bert Green	2007	“ α -Cluster Resonances in ^{23}Na near the $^{19}\text{F}+\alpha$ threshold”	FSU

Supervisor of REU Students at TAMU

- Austin Nelson, South Dakota SU, (2014, June - July).
- Daniel Yates, Pacific University, (2015, June - July).
- Kaitlin Salyer, University of Notre Dame, (2016, June - July).
- Emily Hudson, Swarthmore College, (2016, June - July).

Young Scholars Program students at FSU (YSP)

- Sponsor of two 2007 YSP students, (2007, June - July).
- Sponsor of two 2008 YSP students, (2008, June - July).

Service

International Service

- Chair of the Local Organizing Committee for the VI International Workshop on Direct Reactions with Exotic Beams (DREB2009), Florida State University (Dec. 2009).
- Chair of the Local Organizing Committee for the 4th Workshop of State Of The Art in Nuclear Cluster Physics 2018, Galveston, TX, USA.
- International Advisory Committee for the Workshop on Direct Reactions with Exotic Beams (DREB2012), Pisa, Italy.
- International Advisory Committee for the Summer School on Experimental Nuclear Astrophysics, Santa Tecla, Italy. (Santa Tecla summer school series)
- International Advisory Committee for the Conference on Clustering Aspects of Nuclear Structure and Dynamics. (CLUSTER conference series)
- Organizing committee for “Workshop on Advances in Nuclear Radiation Detectors and Technologies” (Jan. 2011)
- Reviewer for Refereed Journals: Physical Review Letters, Physics Letters B, Physical Review C, Nuclear Physics A, Reports on Progress in Physics, Astrophysical Journal.
- Reviewer for International Funding agencies: National Science and Engineering Research Council of Canada (NSERC); Science&Technology Facilities Council (STFC), United Kingdom.

National Service

- Chair of the NSF review panel for nuclear program at the University of Notre Dame (Feb. 2014).
- FRIB Users Organization Executive Committee (Jan. 2016 - Dec. 2018).
- Convener of FRIB Working Group on Silicon Arrays.
- Convener of the Working Group on “Stable and γ beams, stars, stellar burning, Big Bang, Sun” at the Low energy community meeting for the preparation of the White Paper for the US Long Range Plan. (Aug. 2014).
- Reviewer for National Funding Agencies: National Science Foundation (NSF), Department of Energy (DoE).

University Service

- Faculty Senate (Sep. 2008 - Apr. 2011). FSU.
- Rewiever of Diversity Fellowship Program, (2016). TAMU.

Department Service

- Chair of the “Flying Circus of Physics” outreach program Organizing Committee, (Apr. 2009 - Feb. 2011). FSU.
- Chair of the “Cyclotron electronics pool” standing committee. (January 2015 - present). TAMU
- Undergraduate Advisory Committee, (Apr. 2005 - Apr. 2008). FSU.
- Graduate Affairs Committee, (April 2008 - present). FSU.
- Saturday Morning Physics Committee, (Apr. 2005 - Dec. 2010). FSU.
- Faculty Performance Evaluation Committee (2015). TAMU.
- Tenure committee for Assistant Professor Cody Folden (2015). TAMU.

Outreach

- “Flying Circus of Physics” - Contributor to FSU Department of Physics open-house event (2005, 2007, chair in 2009). FSU.
- “Physics Festival” - Contributor to TAMU Department of Physics&Astronomy annual open-house event (2014, 2015). TAMU.
- Saturday Morning Physics lecturer at FSU (annually from 2006 to 2011).
- Saturday Morning Physics lecturer at TAMU (2014, 2015).