

## Justin Mabiala

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### PERSONAL INFORMATION

Department of Physics  
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### APPOINTMENTS

#### Lecturer I

– Department of Physics, Prairie View A&M University **Mar. 2019 - Present**

#### Adjunct Assistant Professor

– Department of Physics, Prairie View A&M University **Sep. 2017 - Mar. 2019**

#### Adjunct Assistant Professor

– Department of Physics, Lone Star College - University Park **2018 - Present**

#### Postdoctoral Researcher

– INFN - Laboratori Nazionali di Legnaro, Italy **Oct. 2014 - Oct. 2016**

#### Postdoctoral Researcher Associate

– Texas A&M University, USA **Dec. 2011 - Sep. 2014**

#### Researcher/Postdoctoral Fellow

– Stellenbosch University & iThemba LABS, South Africa **Jun. 2010 - Oct. 2011**

### EDUCATION

**Stellenbosch University**, Department of Physics, Stellenbosch, South Africa

Ph.D., Physics, March 2010

- Dissertation Topic: Analyzing power and cross section distributions of the  $^{12}\text{C}(p, p\alpha)^8\text{Be}$  cluster knockout reaction at an incident energy of 100 MeV
- Defence committee: Prof. A.A. Cowley (Promoter), Dr. S.V. Förtsch (Co-promoter), Prof. M. Freer (University of Birmingham), Dr. E.A. Lawrie (iThemba LABS), Dr. S.M. Wyngaardt (Stellenbosch University)

**African Institute for Mathematical Sciences (AIMS)**, Muizenberg, South Africa

Postgraduate diploma in Mathematical Sciences, June 2007.

**Université Marien Nguabi**, Department of Physics, Brazzaville, Congo

Masters without thesis in Physics, Option: Materials Physics, September 2004.

B.S, Physics, July 2003.

### HONORS AND AWARDS

- **INFN Postdoctoral fellowship**, Laboratori Nazionali di Legnaro (LNL), Italy, 2014
- **Scholarship for PhD studies**, National Institute for theoretical Physics (NiThep), South Africa, 2009
- **Scholarship for Masters studies upgraded to PhD**, Stellenbosch University, 2007 - 2008
- **Scholarship for postgraduate studies**, African Institute for Mathematical Sciences (AIMS), 2006 - 2007
- **Scholarship for undergraduate studies**, Université Marien Nguabi, 2001 - 2004

RESEARCH  
EXPERIENCE

**INFN - Laboratori Nazionali di Legnaro, Italy** **Oct. 2014 - Oct. 2016**

- Involved in all research projects carried out by the NUCL-EX collaboration.
- Prepared, presented, and defended a research proposal; designed and performed the experiment; conducted data analysis.
- Interpreted and summarized results for talks, poster presentations, and publication.

**Texas A&M University, USA** **Dec. 2011 - Sep. 2014**

- Involved in several experiments carried out by the SJY group.
- Worked on multiple research projects, conducted extensive data analysis and successfully published results in peer reviewed journals.
- Presented research results at several international conferences, workshops and seminars.

**Stellenbosch University & iThemba LABS, South Africa** **Jun. 2010 - Oct. 2011**

- Proposed an experiment that was accepted by the Program Advisory Committee of the facility.
- Mastered the analysis of experimental data, performed theoretical calculations, presented final results at conferences.
- Provided guidance and technical support to graduate students.

**Stellenbosch University & iThemba LABS, South Africa** **2007 - 2010**

- Conducted experiment at iThemba LABS cyclotron facility. Designed, planned and setup the experiment.
- Participated in the data collection and performed the offline replay and the analysis of the data.
- Interpreted the results, performed theoretical calculations, published the final results and presented them at various conferences.
- Assisted the Head of the Nuclear Physics Group with research projects and some administrative tasks.

TEACHING  
EXPERIENCE

**Department of Physics, Prairie View A&M University** **2017 - Present**

- Courses taught: Physical Science, General Physics, General Physics Lab
- Supervision of TREND undergraduate student

**Lone Star College, University Park, Texas** **2018 - Present**

- Courses taught: University Physics, College Physics and Elementary Physics
- Laboratory tasks covered mechanics, waves, and heat

**Stellenbosch University, Stellenbosch, South Africa** **2008**

- Scientific Assistant to the Head of the Nuclear Physics Group

**Université Marien Ngouabi, Department of Physics, Brazzaville, Congo** **2004-2005**

- Tutor for undergraduate level courses of Physics and Mathematics

**Private High School, Brazzaville, Congo** **2005-2006**

- Teacher of Mathematics and Physics

PROFESSIONAL  
AFFILIATIONS

- Member of SAIP (South African Institute of Physics)
- Member of APS (American Physical Society)

## SKILLS

**Languages:** Fluent in English and French, and strong comprehension of Italian.

**Computing:**

- Experience with Python, FORTRAN and C/C++.
- Experience with with ROOT analysis tool.
- Proficient in Linux, Mac OS and Windows OS.
- Microsoft Office Suite (Word, Excel, Powerpoint) and Latex.

**Languages:** Fluent in English and French, and comprehension of Italian.

SELECTED  
PUBLICATIONS -  
REFEREED  
JOURNALS

1. Marcia Regina Dias Rodrigues, Justin Mabilia, Victor E Iacob, Ninel Nica, Brian Roeder, Gabriel Tabacaru, Kang Wang, Jedidiah Romo, Dustin Scriven, Nolan Tenpas, Georgios A Souliotis, Aldo Bonasera, , **Production of  $^{99}\text{Mo}$  in inverse kinematics heavy ion reactions**, *Radiat. Phys. Chem.* 212, 111162 (2023)
2. M. Cicerchia, F. Gramegna, D. Fabris, M. Cinausero, T. Marchi, G. Andreetta, S. Barlini, M. Bini, R. Bolzonella, M. Bruno, A. Buccola, A. Caciolli, A. Camaiani, G. Casini, N. Cieplicka-Orynczak, G. Collazuol, M. D'Agostino, M. Degerlier, D. Dell'Aquila, L. Domenichetti, B. Fornal, C. Frosin, N. Gelli, D. Gruyer, V. L. Kravchuk, S. Leoni, I. Lombardo, **J. Mabilia**, et al. , **Enhanced  $\alpha$ -particle production from fusion evaporation reactions leading to  $^{46}\text{Ti}$** , *J. Phys. G: Nucl. Part. Phys.* 48, 045101(2021)
3. C.O. Kureba, Z. Buthelezi, J. Carter, G.R.J. Cooper, R.W. Fearick, S. V. Förtsch, M. Jingo, W. Kleinig, A. Krugmann, A.M. Krumbolz, J. Kvasil, **J. Mabilia**, et al., **Wavelet signatures of K-splitting of the Isoscalar Giant Quadrupole Resonance in deformed nuclei from high-resolution (p,p) scattering off  $^{146,148,150}\text{Nd}$** , *Phys. Lett. B* 779, 269-274 (2018)
4. S. Piantelli, S. Valdré, S. Barlini, G. Casini, M. Colonna, G. Baiocco, M. Bini, M. Bruno, A. Camaiani, S. Carboni, M. Cicerchia, M. Cinausero, M. D'Agostino, M. Degerlier, D. Fabris, N. Gelli, F. Gramegna, D. Gruyer, V. L. Kravchuk, **J. Mabilia**, et al. , **Isospin diffusion in binary collisions of  $^{32}\text{S}+^{40,48}\text{Ca}$  and  $^{32}\text{S}+^{48}\text{Ti}$  at 17.7 MeV/nucleon**, *Phys. Rev. C* 96, 034622 (2017)
5. **J. Mabilia**, H. Zheng, A. Bonasera, Z. Kohley, and S. J. Yennello. **Competition between fermions and bosons in nuclear matter at low densities and finite temperatures**, *Phys. Rev. C* 94, 064617 (2016)
6. L. Morelli, M. Bruno, M. D'Agostino, G. Baiocco, F. Gulminelli, U. Abbondanno, S. Barlini, M. Bini, G. Casini, M. Cinausero, M. Degerlier, D. Fabris, F. Gramegna, **J. Mabilia**, et al. , **The  $^{12}\text{C}^*$  Hoyle state in the inelastic  $^{12}\text{C}+^{12}\text{C}$  reaction and in  $^{24}\text{Mg}^*$  decay**, *J. Phys. G: Nucl. Part. Phys.* 43, 045110 (2016)
7. **J. Mabilia**, H. Zheng, A. Bonasera, P. Cammarata, K. Hagel, L. Heilborn, Z. Kohley, L. W. May, A. B. McIntosh, M. D. Youngs, A. Zarrella and S. J. Yennello. **Novel technique to extract experimental symmetry free energy information for nuclear matter**, *Phys. Rev. C* 92, 024605 (2015)
8. Paul Cammarata, Matthew B. Chapman, Alan B. McIntosh, George A. Souliotis, Layla Bakhtiari, Spencer Behling, Giacomo Bonasera, Lauren A. Heilborn, **Justin Mabilia**, et al. , **Studying heavy-ion collisions with coverage near zero degrees using FAUST-QTS**, *Nucl. Instrum. Methods Phys. Res., Sect. A* 792, 61 (2015)
9. J. J. van Zyl, A. A. Cowley, R. Neveling, E. Z. Buthelezi, S. V. Förtsch, **J. Mabilia**, et al., **Incident-energy dependence of angular distributions of cross section and analyzing power for the  $^{58}\text{Ni}(p,^3\text{He})^{56}\text{Co}$  reaction between 80 and 120 MeV** , *Phys. Rev. C* 91, 024614 (2015)
10. H. Zheng, G. Bonasera, **J. Mabilia**, P. Marini, A. Bonasera. **Density and Temperature in Heavy Ion Collisions: A Test of Classical and Quantum Approaches**, *Eur. Phys. J. A* 50, 167 (2014)

11. **J. Mabilia**, H. Zheng, A. Bonasera, P. Cammarata, K. Hagel, L. Heilborn, Z. Kohley, L. W. May, A. B. McIntosh, M. D. Youngs, A. Zarrella, S. J. Yennello. **Coulomb corrections to experimental temperatures and densities in Fermi-energy heavy-ion collisions**, *Phys. Rev. C* 90, 027602 (2014)
12. Paul Cammarata, Maria Colonna, Aldo Bonasera, Alan B. McIntosh, Zach Kohley, Larry W. May, Matthew B. Chapman, Lauren A. Heilborn, **Justin Mabilia**, et al., **Sifting through the remnants of heavy-ion collisions for observables sensitive to the nuclear equation of state**, *Nucl. Instrum. Methods Phys. Res., Sect. A* 761, 1 (2014)
13. A. B. McIntosh, **J. Mabilia**, et al., **How much cooler would it be with some more neutrons?. Exploring the asymmetry dependence of the nuclear caloric curve and the liquid-gas phase transition**, *Eur. Phys. J. A* 50, 35 (2014)
14. B. C. Stein, A. Bonasera, G. A. Souliotis, H. Zheng, P. J. Cammarata, A. J. Echeverria, L. Heilborn, A. L. Keksis, Z. Kohley, **J. Mabilia**, et al., **Quantum suppression of fluctuations and temperatures of reconstructed A = 30 quasiprojectiles**, *J. Phys. G* 41, 025108 (2014)
15. **J. Mabilia**, A. Bonasera, H. Zheng, A. B. McIntosh, Z. Kohley, P. Cammarata, K. Hagel, L. Heilborn, L. W. May, A. Raphelt, G. A. Souliotis, A. Zarrella, and S. J. Yennello. **Critical Scaling of Two-component Systems from Quantum Fluctuations**, *Int. J. Mod. Phys. E* 22, 1350090 (2013)
16. G. Röpke, S. Shlomo, A. Bonasera, J. B. Natowitz, S. J. Yennello, A. B. McIntosh, **J. Mabilia**, et al., **Density determinations in heavy ion collisions**, *Phys. Rev. C* 88, 024609 (2013)
17. A.B. McIntosh, A. Bonasera, Z. Kohley, P.J. Cammarata, K. Hagel, L. Heilborn, **J. Mabilia**, et al., **Using Light Charged Particles to Probe the Asymmetry Dependence of the Nuclear Caloric Curve**, *Phys. Rev. C* 87, 034617 (2013)
18. P. Marini, A. Bonasera, G.A. Souliotis, P. Cammarata, S. Wuenschel, R. Tripathi, Z. Kohley, K. Hagel, L. Heilborn, **J. Mabilia**, L.W. May, A.B. McIntosh, and S.J. Yennello. **Systematic study of the symmetry energy within the approach of the statistical multifragmentation model**, *Phys. Rev. C* 87, 024603 (2013)
19. A.B. McIntosh, A. Bonasera, P. Cammarata, K. Hagel, L. Heilborn, Z. Kohley, **J. Mabilia**, L.W. May, P. marini, A. Raphelt, G.A. Souliotis, S. Wuenschel, A. Zarrella, S.J. Yennello. **Asymmetry dependence of the nuclear caloric curve**, *Phys. Lett. B* 719, 337-340 (2013)
20. P. Marini, A. Zarrella, A. Bonasera, G. Bonasera, P. Cammarata, L. Heilborn, Z. Kohley, **J. Mabilia**, L.W. May, A.B. McIntosh, A. Raphelt, G.A. Souliotis, S.J. Yennello. **Experimental determination of the quasi-projectile mass with measured neutrons**, *Nucl. Instrum. Methods Phys. Res., Sect. A* 707, 80-88 (2013)
21. **J. Mabilia**, et al., **Investigation of the nuclear phase transition using the Landau free-energy approach**, *Phys. Rev. C* 87, 017603 (2013)
22. F.D. Smit, F. Nemulodi, Z. Buthelezi, J. Carter, R. W. Fearick, S. V. Förtsch, M. Freer, H. Fujita, M. Jingo, C.O. Kureba, **J. Mabilia**, et al., **No evidence of an 11.6 MeV  $2^+$  state in  $^{12}\text{C}$** , *Phys. Rev. C* 86, 037301 (2012)
23. R. Neveling, H. Fujita, F.D. Smit, T. Adachi, G.P.A. Berg, E.Z. Buthelezi, J. Carter, J.L. Conradie, M. Couder, R.W. Fearick, S. V. Förtsch, D.T. Fourie, Y. Fujita, J. Görres, K. Hatanaka, M. Jingo, A.M. Krumbholz, C.O. Kureba, J.P. Mira, S.H.T. Murray, P. von Neumann-Cosel, S. O'Brien, P. Papka, I. Poltoratska, A. Richter, E. Sideras-Haddad, J.A. Swartz, A. Tamii, I.T. Usman, J.J. van Zyl, **J. Mabilia**. **High energy-resolution zero-degree facility for light-ion scattering and reactions at iThemba LABS**, *Nucl. Instrum. Methods Phys. Res., Sect. A* 662, 101 (2012)
24. B. Mouginot, E. Khan, R. Neveling, F. Azaiez, E.Z. Buthelezi, S.V. Förtsch, S. Franco, H. Fujita, **J. Mabilia**, et al., **Search for the giant pairing vibration through  $(p, t)$  reactions around 50 and 60 MeV**, *Phys. Rev. C* 83, 037302 (2011)

25. J. Mabiála, A. A. Cowley, et al., **Analyzing power and cross section distributions of the  $^{12}\text{C}(p, p\alpha)^8\text{Be}$  cluster knockout reaction at an incident energy of 100 MeV**, *Phys. Rev. C* 79, 054612 (2009)
26. A. A. Cowley, J. Mabiála, et al., **Analyzing power distribution in the  $^{12}\text{C}(p, p\alpha)^8\text{Be}(\text{g.s.})$  reaction at an incident energy of 100 MeV**, *Europhys. Lett.* 85, 22001 (2009)

SELECTED  
CONFERENCE  
PROCEEDINGS

1. Marcia Regina Dias Rodrigues, Victor E Iacob, Ninel Nica, Brian Roeder, Gabriel Tabacaru, Kang Wang, Meixiang Yu, Paulo Zanotti-Fregonara, **Justin Mabiála**, et al., **A novel approach to medical radioisotope production using inverse kinematics**, *EPJ Web of Conferences*, 252, 08002 (2021)
2. **Justin Mabiála**, Marcia R. D. Rodrigues, Georgios A. Souliotis, Victor E. Iacob, Ninel Nica, Brian Roeder, Gabriel Tabacaru, Kang Wang, Jedidiah Romo, Dustin Scriven, Nolan Tenpas, and Aldo Bonasera, **Enhanced production of  $^{99}\text{Mo}$  in inverse kinematics heavy ion reactions**, *EPJ Web of Conferences*, 252, 08003 (2021)
3. D Fabris, F Gramegna, M Cicerchia, T Marchi, S Barlini, S Piantelli, M Bini, M Bruno, G Casini, M Cinausero, M D'agostino, M Degerlier, N Gelli, G Mantovani, L Morelli, **J Mabiála**, et al., **Pre-equilibrium emission to study clustering in nuclei**, *EPJ Web of Conferences*, 163, 00016 (2017)
4. Fabiana Gramegna, Magda Cicerchia, Daniela Fabris, Tommaso Marchi, Marco Cinausero, Meltem Degerlier, **Justin Mabiála**, et al., **Clustering in light nuclei and their effects on fusion and pre-equilibrium processes**, *EPJ Web of Conferences*, 163, 00020 (2017)
5. M Cicerchia, T Marchi, F Gramegna, M Cinausero, **J Mabiála**, et al., **Pre-equilibrium emission and clustering in medium-mass nuclei:  $^{46}\text{Ti}$  from  $^{16}\text{O} + ^{30}\text{Si}$ ,  $^{18}\text{O} + ^{28}\text{Si}$ ,  $^{19}\text{F} + ^{27}\text{Al}$** , *J. Phys. : Conf. Ser.* , 863, 012057 (2017)
6. Simone Valdré, S Piantelli, G Casini, S Barlini, M Ciemala, M Kmiecik, A Maj, K Mazurek, M Cinausero, F Gramegna, VL Kravchuk, L Morelli, Tommaso Marchi, S Appannababu, G Baiocco, P Bednarczyk, G Benzoni, M Bini, N Blasi, A Bracco, S Brambilla, M Bruno, F Camera, M Cicerchia, M Colonna, FCL Crespi, M D'Agostino, M Degerlier, D Fabris, B Fornal, OV Fotina, A Giaz, M Krzysiek, S Leoni, **J Mabiála**, et al., **Constraining Hot Sources in Central Heavy-ion Collisions Below 20 MeV/u**, *Acta Physica Polonica B*, 48 (3), 635 (2017)
7. **J Mabiála**, et al.,  **$^{16}\text{O} + ^{65}\text{Cu}$  and  $^{19}\text{F} + ^{62}\text{Ni}$  at 16 A MeV reaction mechanisms comparison: Pre-equilibrium vs. clustering**, *Il Nuovo Cimento C*, 39 C, 381 (2016)
8. G Pastore, S Piantelli, D Gruyer, L Augey, S Barlini, R Bougault, M Bini, A Boiano, Eric Bonnet, B Borderie, M Bruno, G Casini, A Chbib, M Cinausero, D Dell'Aquila, JA Dueñas, Q Fable, D Fabris, L Francalanza, JD Frankland, F Gramegna, M Henri, A Kordyasz, Tomasz Kozik, R La Torre, N Le Neindre, I Lombardo, O Lopez, **J Mabiála**, et al., **Progresses in FAZIA detection system and preliminary results from the ISO-FAZIA experiment**, *Il Nuovo Cimento C*, 39 C, 383 (2016)
9. Andrew Zarrella, Paola Marini, Alan B. McIntosh, Paul Cammarata, Lauren Heilborn, **Justin Mabiála**, Larry W. May, Andrew Raphelt, Sherry Yennello, **Source-Specific Neutron Detection Efficiencies of the TAMU Neutron Ball**, *J. Phys. : Conf. Ser.* , 420, 012164 (2013)
10. Paul J. Cammarata, Alan B. McIntosh, Maria Colonna, Larry W. May, Lauren Heilborn, **Justin Mabiála**, Andrew Raphelt, Andrew Zarrella1, and Sherry J. Yennello, **Asymmetry Energy Effects on Reaction Break-up Mechanisms Near the Fermi Energy**, *J. Phys. : Conf. Ser.* , 420, 012113 (2013)
11. L W May, P Cammarata, L Heilborn, Z Kohley, **J Mabiála**, A McIntosh, A Raphelt, A Zarrella, S J Yennello. **Equation of State Effects on Nucleon Transport**, *J. Phys. : Conf. Ser.* , 420, 012112 (2013).

12. L. Heilborn, H. Zheng, A. Bonasera, A.B. McIntosh, P. J. Cammarata, **J Mabilia**, L.W. May, A. Raphelt, G. A. Souliotis, A. Zarella, S.J. Yennello, **Particle-particle correlation functions as an experimental probe of the nuclear asymmetry energy**, *J. Phys. : Conf. Ser.* , 420, 012111 (2013)
13. **J Mabilia**, A Bonasera, H Zheng, A B McIntosh, Z Kohley, P Cammarata, K Hagel, L Heilborn, L W May, A Raphelt, G A Souliotis, A Zarrella, and S J Yennello, **Experimental signals of a nuclear liquid-gas phase transition**, *J. Phys. : Conf. Ser.* , 420, 012110 (2013)
14. A. Raphelt, G.A. Souliotis, P.J. Cammarata, L. Heilborn, **J. Mabilia**, L.W. May, B.C. Stein, A. Zarella, S.J. Yennello, **Temperature Measurements in Low Excitation Energy Reactions to Probe a Possible Phase Transition**, *J. Phys. : Conf. Ser.* , 420, 012109 (2013)
15. A B McIntosh, A Bonasera, P Cammarata, K Hagel, L Heilborn, Z Kohley, **J. Mabilia**, et al., **Asymmetry Dependence of the Nuclear Caloric Curve**, *J. Phys. : Conf. Ser.* , 420, 012085 (2013)
16. J.J. van Zyl, R. Neveling, A.A. Cowley, E.Z. Buthelezi, S.V. Förtsch, **J. Mabilia**, et al., **Angular Distributions of the Analysing Power in the Excitation of Low Lying States of  $^{56}\text{Co}$** , *NUCLEAR THEORY*, 30, (2011), eds. A. Georgieva, N. Minkov, Heron Press, Sofia
17. **J. Mabilia**, E Z Buthelezi, A A Cowley, S V Förtsch, et al., **Characterization of cluster states in  $^{16}\text{O}$  with the  $(p, t)$  reaction**, *SA Institute of Physics 2011*, ISBN: 978-1-86888-688-3
18. A. A. Cowley, **J. Mabilia**, E. Z. Buthelezi, S. V. Förtsch, R. Neveling, F. D. Smit, G. F. Steyn, and J. J. van Zyl, **Proton-induced alpha-cluster knockout from  $^{12}\text{C}$** , *12th International Conference on Nuclear Reaction Mechanisms*, Villa Monastero, Varenna, Italy, 15-19 June 2009, pp.317-322
19. Förtsch, SV; Steyn, GF; Gadioli, E; Bassini, R; Buthelezi, EZ; Cerutti, F; Connell, SH; Cowley, AA; Fujita, H; **Mabilia, J**; et al., **Binary projectile fragmentation of  $^{12}\text{C}$  at an incident energy of 33.3 MeV/nucleon**, *12th International Conference on Nuclear Reaction Mechanisms*, Villa Monastero, Varenna, Italy, 15-19 June 2009, pp.545-552
20. A. A. Cowley, **J. Mabilia**, E. Z. Buthelezi, S. V. Förtsch, R. Neveling, F. D. Smit, G. F. Steyn, and J. J. van Zyl, **Factorization of the cross section for the  $^{12}\text{C}(p, p\alpha)^8\text{Be}(\text{g.s.})$  reaction at an incident energy of 100 MeV**, *Proc. Int. Conf. on Nuclear Structure and Dynamics*, May 2009 (AIPConference Series)

SELECTED  
ORAL/POSTER  
PRESENTATIONS

1. **Enhanced production of  $^{99}\text{Mo}$  in inverse kinematics heavy ion reactions**, **6<sup>th</sup> Workshop of the Hellenic Institute of Nuclear Physics (HINP), National and Kapodistrian University of Athens, May 14-16, 2021.**
2.  **$^{16}\text{O}+^{65}\text{Cu}$  and  $^{19}\text{F}+^{62}\text{Ni}$  at 16 A.MeV reaction mechanisms comparison: Pre-equilibrium vs Clustering**, **International Workshop on Multi facets of Eos and Clustering ( IWM-EC 2016), GANIL (Caen), France, May 9-12, 2016.**
3. **Experimental results on critical densities and temperatures from quantum fluctuations**, **International Workshop on Nuclear Dynamics and Thermodynamics, Texas AM University, College Station, Texas, USA, August 19-22, 2013.**
4. **Critical behavior of nuclear systems from quantum fluctuations**, **3<sup>rd</sup> International Symposium on Nuclear Symmetry Energy, NSCL/FRIB, East Lansing, Michigan, USA, July 22-26, 2013.**
5. **Critical scaling of excited nuclear systems from quantum fluctuations**, **American Physical Society (APS) meeting, Denver, Colorado, USA, April 13-16, 2013.**
6. **Experimental signals of a nuclear liquid-gas phase transition**, **11<sup>th</sup> International Conference on Nucleus-Nucleus Collisions, San Antonio, Texas, USA, May**

**27-June 1, 2012.**

7. *Characterization of cluster states in  $^{16}\text{O}$  with the  $(p,t)$  reaction*, **56<sup>th</sup> Annual Conference of the South African Institute of Physics (SAIP), University of South Africa (UNISA), Pretoria, South Africa, 2011.**
8.  $^{12}\text{C}(p,p\alpha)^8\text{Be}$  *quasifree alpha-cluster knockout reaction with 100 MeV polarized protons*, **54<sup>th</sup> Annual Conference of the South African Institute of Physics (SAIP), University of KwaZulu Natal, Durban, South Africa, July 6-10, 2009.**

## REFERENCES

**Prof. S.J. Yennello**

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