

# Appendix 01: Biographical Sketch – Senior Investigators

## Jonathan Asaadi

### Education and Training

<u>Institution</u>	<u>Location</u>	<u>Major</u>	<u>Degree &amp; Year</u>
Undergraduate Institution	University of Iowa	Physics	B.S. 2004
Graduate Institution	Texas A&M University	Physics	M.S. 2007
Graduate Institution	Texas A&M University	Physics	PhD. 2012

### Research and Professional Experience

Assistant Professor	University of Texas Arlington	2015 – Present
Postdoctoral Researcher	Syracuse University	2012 – 2015

### Relevant Publications

- **First measurement of the cross section for  $\nu_\mu$  and  $\bar{\nu}_\mu$  induced single charged pion production on argon using ArgoNeuT**  
*ArgoNeuT Collaboration: R. Acciarri et al*  
Phys. Rev. D 98, 052002 (2018) , arXiv: 1804.10294 (Reviewer and Collaborator)
- **Tetraphenyl Butadiene Emanation and Bulk Fluorescence from Wavelength Shifting Coatings in Liquid Argon**  
*J. Asaadi, B. J. P. Jones, A. Tripathi, I. Parmaksiz, H. Sullivan, Z. G. R. Williams*  
Submitted to JINST, arXiv: 1804.00011 (Primary author and primary analyzer)
- **First Demonstration of a Pixelated Charge Readout for Single-Phase Liquid Argon Time Projection Chambers**  
*J. Asaadi, M. Auger, A. Ereditato, D. Goeldi, R. Haenni, U. Kose, I Kreslo, D. Lorca, M. Luethi, C. Rudolf Von Rohr, J. R. Sinclair, F. Stocker, C. Tognina, M. Weber*  
Submitted to JINST, arXiv:1801.08884 (Contributing author and analyzer)
- **A New Light Higgs Boson and Short-Baseline Neutrino Anomalies**  
*J. Asaadi, E. Church, R. Guenette, B. J. P. Jones, A. M. Szelc*  
Phys. Rev. D 97, 075021 (2018), arXiv:1712.08019 (Contributing author and analyzer)
- **Design and construction of the MicroBooNE Detector**  
*MicroBooNE Collaboration: R. Acciarri, et. al*  
JINST 12 P02017 (2017) arXiv:1612.05824 (Contributing author and analyzer)
- **First Observation of Low Energy Electron Neutrinos in Liquid Argon TPC Detectors**  
*ArgoNeuT Collaboration: R. Acciarri et al*  
Phys. Rev. D 95, 072005 (2017), arXiv: 1610.04102 (Reviewer and collaborator)
- **Construction and Assembly of the Wire Planes for the MicroBooNE Time Projection Chamber**  
*R. Acciarri, C. Adams, J. Asaadi, J. Danaher, B.T. Fleming, R. Gardner, S. Gollapinni, R. Grosso, R. Guenette, B.R. Littlejohn, S. Lockwitz, J.L. Raaf, M. Soderberg, J. St. John, T. Strauss, A.M. Szelc, B. Yu*  
JINST 12 T03003 (2017), arXiv:1609.06169 (Contributing author and analyzer)
- **Measurement of  $\nu_\mu$  and  $\bar{\nu}_\mu$  Neutral Current  $\pi^0 \rightarrow \gamma\gamma$  Production in the ArgoNeuT Detector**  
*ArgoNeuT Collaboration: R. Acciarri et al*  
Phys. Rev. D 96, 012006 (2017), arXiv:1511.00941 (Primary author and primary analyzer)

- **Testing of High Voltage Surge Protection Devices for Use in Liquid Argon TPC Detectors**  
*J. Asaadi, J.M. Conrad, S. Gollapinni, B.J.P. Jones, H. Jostlein, J.M. St. John, T. Strauss, S. Wolbers, J. Zennamo*  
JINST 9 P09002 (2014), arXiv:1406.5216 (**Primary author and primary analyzer**)
- **The detection of back-to-back proton pairs in Charged-Current neutrino interactions with the ArgoNeuT detector in the NuMI low energy beam**  
*ArgoNeuT Collaboration: R. Acciarri et al*  
Phys. Rev. D 90, 012008 (2014), arXiv:1405.4261 (**Reviewer and collaborator**)

### **Synergistic Activities**

- **Deputy co-convenor of ICARUS TPC Electronics**
- **CENF-ND Experimental Cross-Section Working Group Convener**  
(in collaboration with Dr. Sara Bolognesi, 2018 - Present)
- **Co-Spokesperson for the LArIAT Experiment**  
(in collaboration with Dr. Jen Raaf, 2016-Present)
- **Fermilab Detector R&D Advisory Board Member** (November 2016 – Present)
- **MicroBooNE TPC Subsystem Lead** (October 2015 – Present)

### **Collaborators and Co-Editors:**

Adam Aurisano	University of Cincinnati	Collaborator
Bruce Baller	Fermilab	Collaborator
Tim Bolton	Kansas State University	Collaborator
Carl Bromberg	Michigan State University	Collaborator
Flavio Cavanna	Fermilab	Collaborator
Eric Church	Pacific Northwest National Laboratory	Collaborator
Janet Conrad	Massachusetts Institute of Technology	Collaborator
Bhaskar Dutta	Texas A&M	Graduate Advisor
Antonio Ereditato	Bern University	Collaborator
Bonnie Fleming	Yale University	Collaborator
Teruki Kamon	Texas A&M University	Graduate Advisor
Igro Kreslo	Bern University	Collaborator
Ornella Palamara	Fermilab	Collaborator
Jennifer Raaf	Fermilab	Collaborator
Brian Rebel	Fermilab	Collaborator
Mitch Soderberg	Syracuse University	Post-doctoral Advisor
Josh Spitz	University of Michigan	Collaborator
Andrzej Szlec	Manchester University	Collaborator
David Toback	Texas A&M University	Graduate Advisor (Chair)
Michele Weber	Bern University	Collaborator
Tingjun Yang	Fermilab	Collaborator
Geralyn Zeller	Fermilab	Collaborator

### **Graduate Advisors and Postdoctoral Sponsors**

Prof. David Toback (Texas A&M)  
Prof. Mitch Soderberg (Syracuse University)

### **Graduate Students and Postdoctoral Associates**

Andrea Falcone	University of Texas Arlington	Post-doctoral Researcher
Zach Williams	University of Texas Arlington	Graduate Student
Hunter Sullivan	University of Texas Arlington	Graduate Student