



Name: Gabriel Casabona

Year 4 of 4

### Verification of Fellowship and Dissertation Calendar and Publication Information

<i><b>Fellowship Completion Schedule</b></i>	<i><b>Date</b></i>
Date Fellowship Began	<b>2019</b>
Date to Identify M.S. Thesis Topic *	<b>n/a</b>
Date to Finish M.S. Thesis Research *	<b>n/a</b>
Date to Receive M.S. Degree *	<b>n/a</b>
Date of Ph.D. Candidacy Exams	<b>06/23</b>
Date to Identify Ph.D. Dissertation Topic	<b>06/23</b>
Date of Dissertation Defense	<b>06/25</b>
Date Ph.D. Dissertation Final Submission	<b>06/25</b>
Date to Receive Ph.D. Degree	<b>06/25</b>

**M.S. Thesis Topic \***

n/a

**Ph.D. Thesis Area**

Theoretical Astrophysics

**Ph.D. Dissertation Topic**

Theoretical and computational modeling of a fully general relativistic fluid model for neutron stars.

**Publications**

Mozumdar, P., Fisher, R., & Casabona, G (Jul 2018). Carbon Detonation Initiation in Turbulent Electron-Degenerate Matter. arXiv:1807.03786 (in submission to ApJ)

Casabona, G (Mar 2019). Detonation Initiation in Type Ia Supernovae. APS March 2019. Boston, Massachusetts

Casabona, G (Nov 2018). Carbon Detonation Initiation in Turbulent Electron-Degenerate Matter. APS New England 2018. University of Massachusetts Dartmouth

Casabona, G (Apr 2018). Carbon Detonation Initiation in Turbulent Electron-Degenerate Matter. APS April 2018. Columbus, Ohio

Casabona, G (Jan 2019). Detonation Initiation in Type Ia Supernovae.

223 rd Meeting of the AAS. Seattle, Washington

Casabona, G (Nov 2018). Carbon Detonation Initiation in Turbulent Electron-Degenerate Matter. APS Bridge/NMC Conference 2018. Stanford University

Casabona, G (Jul 2018). Carbon Detonation Initiation in Turbulent Electron-Degenerate Matter. IHPCSS. Technical University of Ostrava, Czech Republic

**Awards and honors**

FIU Dean's List: Spring 2013, Spring 2016

I have completed this dissertation calendar and publication information form and affirm that to the best of my knowledge it accurately reflects my expected plans.

Signature of Fellow \_\_\_\_\_ Date \_\_\_\_\_

Signature of Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

Signature of Krell Institute \_\_\_\_\_ Date \_\_\_\_\_

**Please send the signed page to the following address:**

**DOE Computational Science Graduate Fellowship Program**

Krell Institute

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*\* If Applicable*