

NONREIMBURSABLE SPACE ACT AGREEMENT
BETWEEN
THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION
GODDARD SPACE FLIGHT CENTER
AND GEORGE WASHINGTON UNIVERSITY
FOR JOINT COLLABORATIVE FRAMEWORK FOR ASTROPHYSICAL STUDIES

ARTICLE 1. AUTHORITY AND PARTIES

In accordance with the National Aeronautics and Space Act (51 U.S.C. § 20113(e)), this Agreement is entered into by the National Aeronautics and Space Administration Goddard Space Flight Center, located at 8800 Greenbelt Road, Greenbelt, Maryland 20771 (hereinafter referred to as "NASA" or "NASA GSFC") and George Washington University located at Office of the Vice President for Research, 1922 F Street NW, 4th Floor, Washington, DC 20052-0042 (hereinafter referred to as "Partner" or "GW"). NASA and GW may be individually referred to as a "Party" and collectively referred to as the "Parties."

ARTICLE 2. PURPOSE

The goal of this Agreement is to facilitate world-class, fully integrated astrophysical research and educational initiatives by ASD and GW. This Agreement reaffirms and expands the Parties' existing relationship, with the intention that a more robust and formal framework will enable the Parties to enrich their collaborations in scientific areas of critical public interest. This Agreement is intended to complement and not replace any existing or future cooperative agreements and grants (if awarded), or other written agreements, that may be entered into between the Parties from time to time.

The current astrophysics group of the GW Physics Department and the GSFC ASD scientists have a long history of very fruitful collaboration in the field of High-Energy Astrophysics (HEA), Astroparticle Physics, and Cosmology, which includes instrument development and operation, as well as data analysis. The two institutes pursue common goals that justify tighter connections that will benefit both.

Within this Agreement, GW and GSFC ASD researchers will address fundamental scientific questions related to the origin, nature, composition and evolution of HEA sources within our Galaxy (*e.g.*, magnetars, neutron stars, binary systems, Active Galactic Nuclei), and the production sites of High Energy cosmic rays (*e.g.*, pulsar wind nebulae; PWNe). Further, they will study explosive transients at cosmological distances (*e.g.*, Gamma Ray Bursts; GRBs, Fast Radio Bursts; FRBs), and will perform searches for the electromagnetic counterparts of Gravitational Waves using current and next generation multi-messenger observatories (*e.g.*, Swift, Fermi, aLIGO and the Transient Astrophysics Probe; TAP).

These research tasks will make intensive use of data collected using current and past NASA, ESA, and JAXA missions, such as the Fermi Gamma Ray Space Telescope, the

Compton Gamma Ray Observatory, the Neutron Star Interior Composition Explorer, the Neil Gehrels Swift Observatory, the Chandra X-ray Observatory, INTEGRAL, Suzaku, and XMM-Newton, among others. This collaboration aims to enhance the scientific return of these vast data sets. GSFC and GW scientists will also combine their expertise in data analysis and mining to improve the current analysis tools provided to the community and develop new ones. Under this Agreement, the GW scientists will benefit from enhanced opportunities for its students and faculty to collaborate with ASD activities. Such opportunities will include access to laboratories, computer resources and modeling, and satellite data. It is anticipated that this access will result in enhanced research and educational opportunities, plus new and innovative educational programs for undergraduate, graduate, and postdoctoral education. These interactions may result in new courses at both the graduate and the undergraduate levels. In addition, both institutions will benefit from having ASD scientists gain increased opportunities to participate in teaching at GW. NASA will benefit from having a pipeline of student research assistants and post-doctoral scientists continue into regular positions in NASA, thereby helping NASA achieve its projected need for trained personnel at all levels.

The GW research group will also support GSFC efforts for the definition, design, development, integration, and operation of the new generation of X- and gamma-ray instruments. Currently, GW researchers are heavily involved in the TAP and the All-sky Medium Energy Gamma ray Observatory (AMEGO) projects led by ASD. GW involvement in future ASD mission development is anticipated.

In addition to these core initial activities, the Parties to this Agreement envision future expansion into other areas as mutually desired and as set forth in further agreements. Any commitments by the Parties regarding use of each other's facilities will be documented under separate written agreements.

ARTICLE 3. RESPONSIBILITIES

A. NASA GSFC will use reasonable efforts to:

NASA will provide access to toolboxes, models, and resources, as well as assign research and support personnel to help enable a comprehensive astrophysics research effort and other areas of mutual interest, including space sciences. Specifically, GSFC will use reasonable efforts to promote:

1. Provide a single NASA Point of Contact, who will work with GW, to identify the opportunities mentioned below.
2. Collaborate with GW to plan programs that include NASA speakers, materials, information and exhibits, technical workshops symposia etc. Plan and execute one event each calendar year.
3. Actively participate in job fairs and career development programs to ensure students understand the broad scope of opportunities in the aerospace industry.
4. Identify research and engineering projects, initiatives and collaborative activities located at NASA GSFC that are designed to provide GW students and professors with focused opportunities to volunteer their support and engage in experiential hands-on

activities at NASA GSFC under the direction of NASA GSFC scientists and engineers.

5. Provide administrative support in the coordination of logistics associated with badging, usage of laboratories or government property and associated tours or shadowing opportunities.
6. Provide information and guidance to GW students on internships and career opportunities at NASA GSFC.
7. Provide technical expertise to advise on engineering curriculum, as GW develops courses of study to meet the needs of the aerospace community.

Although it is anticipated that initial activities under this Agreement will focus on High Energy and Particle Astrophysics, joint activities could expand to include other scientific areas of mutual interest to the Parties.

B. Partner will use reasonable efforts to:

GW's faculty and researchers will work with ASD scientists on High Energy and Particle Astrophysics, as well as other areas of mutual interest. The Parties envision the active involvement of the GW Department of Physics. GW will use reasonable efforts to promote:

1. Provide a single GW Point of Contact, who will work with NASA GSFC, to identify the opportunities mentioned below.
2. Identify academically qualified GW students and professors for voluntary participation in the activities described above.
3. Ensure that all GW students and personnel abide by Agency policies, regulations and requirements.
4. Collaborate with GSFC to plan programs on campus to include NASA speakers, materials, information and exhibits, technical workshops, symposia and other knowledge-sharing events.
5. Include GSFC in job fairs and career development programs to ensure students understand the broad scope of opportunities in the aerospace industry.
6. Collaborate on development of curriculum that improves the pipeline as well as continuing education for NASA employees.
7. Provide teaching and speaking opportunities for NASA staff as well as GW faculty for the opportunity to share new knowledge between the organizations when of mutual benefit.

ARTICLE 4. SCHEDULE AND MILESTONES

A Steering Committee consisting of GSFC and GW research leaders and appropriate levels of senior administrators from both organizations will meet semiannually to formally discuss progress and issues under this Agreement. Meetings during the last two years of this Agreement will serve as gates to support decisions by NASA for the period following the expiration of this Agreement.

The planned major milestones for the activities defined in the "Responsibilities" Article are as follows:

Responsibility/Milestone	Schedule
GW and GSFC will participate in Steering Group Meetings.	Every 6 months at mutually agreed dates
GW will arrange Earth Institute Faculty Meetings.	As scheduled, not less than once per year
GW and GSFC will jointly host a research workshop focused on problems in fields relevant to GSFC ASD and GW.	Once per year
GW and GSFC will continue the series of research direction meetings on specific topics of joint interest to explore possibilities for new initiatives and funding. Establish task leaders to pursue ideas generated.	Ongoing
GW and GSFC will ensure GSFC visibility in relevant graduate student programs across GW and host a graduate student open day.	Once per year

ARTICLE 5. FINANCIAL OBLIGATIONS

There will be no transfer of funds between the Parties under this Agreement and each Party will fund its own participation. All activities under or pursuant to this Agreement are subject to the availability of funds, and no provision of this Agreement shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, (31 U.S.C. § 1341).

This Agreement provides a framework for exploring areas of mutual interest but does not itself establish any research, programmatic, or financial commitment. Meetings of the Steering Committee and other collaborative planning activities will take place in accordance with Article 4.

For projects, activities, or exchanges of mutual interest which do involve a transfer of funds or other financial obligations between the Parties, such projects, activities, and exchanges will be documented through a separate legal instrument, which could include a Reimbursable Space Act Agreement, contract, or a Cooperative Agreement or Grant, if awarded.

ARTICLE 6. PRIORITY OF USE

Any schedule or milestone in this Agreement is estimated based upon the Parties' current understanding of the projected availability of NASA goods, services, facilities, or equipment. In the event that NASA's projected availability changes, Partner shall be given reasonable notice of that change, so that the schedule and milestones may be adjusted accordingly. The Parties agree that NASA's use of the goods, services, facilities, or equipment shall have priority over the use planned in this Agreement. Should a conflict arise, NASA in its sole discretion shall determine whether to exercise that priority. Likewise, should a conflict arise as between two or more non-NASA Partners,

NASA, in its sole discretion, shall determine the priority as between those Partners. This Agreement does not obligate NASA to seek alternative government property or services under the jurisdiction of NASA at other locations.

ARTICLE 7. NONEXCLUSIVITY

This Agreement is not exclusive; accordingly, NASA may enter into similar agreements for the same or similar purpose with other private or public entities.

ARTICLE 8. LIABILITY AND RISK OF LOSS

A. Each Party hereby waives any claim against the other Party, employees of the other Party, the other Party's Related Entities (including but not limited to contractors and subcontractors at any tier, grantees, investigators, customers, users, and their contractors or subcontractor at any tier), or employees of the other Party's Related Entities for any injury to, or death of, the waiving Party's employees or the employees of its Related Entities, or for damage to, or loss of, the waiving Party's property or the property of its Related Entities arising from or related to activities conducted under this Agreement, whether such injury, death, damage, or loss arises through negligence or otherwise, except in the case of willful misconduct.

B. Each Party further agrees to extend this cross-waiver to its Related Entities by requiring them, by contract or otherwise, to waive all claims against the other Party, Related Entities of the other Party, and employees of the other Party or of its Related Entities for injury, death, damage, or loss arising from or related to activities conducted under this Agreement. Additionally, each Party shall require that their Related Entities extend this cross-waiver to their Related Entities by requiring them, by contract or otherwise, to waive all claims against the other Party, Related Entities of the other Party, and employees of the other Party or of its Related Entities for injury, death, damage, or loss arising from or related to activities conducted under this Agreement.

ARTICLE 9. LIABILITY AND RISK OF LOSS - PRODUCT LIABILITY

With respect to products or processes resulting from a Party's participation in an SAA, each Party that markets, distributes, or otherwise provides such product, or a product designed or produced by such a process, directly to the public will be solely responsible for the safety of the product or process.

ARTICLE 10. INTELLECTUAL PROPERTY RIGHTS - DATA RIGHTS

A. General

1. "Related Entity" as used in this Data Rights Article means a contractor, subcontractor, grantee, or other entity having a legal relationship with NASA or Partner that is assigned, tasked, or contracted to perform activities under this Agreement.
2. "Data" means recorded information, regardless of form, the media on which it is recorded, or the method of recording.
3. "Proprietary Data" means Data embodying trade secrets developed at private

- expense or commercial or financial information that is privileged or confidential, and that includes a restrictive notice, unless the Data is:
- a. known or available from other sources without restriction;
 - b. known, possessed, or developed independently, and without reference to the Proprietary Data;
 - c. made available by the owners to others without restriction; or
 - d. required by law or court order to be disclosed.
4. Data exchanged under this Agreement is exchanged without restriction except as otherwise provided herein.
 5. Notwithstanding any restrictions provided in this Article, the Parties are not restricted in the use, disclosure, or reproduction of Data provided under this Agreement that meets one of the exceptions in 3., above. If a Party believes that any exceptions apply, it shall notify the other Party before any unrestricted use, disclosure, or reproduction of the Data.
 6. The Parties will not exchange preexisting Proprietary Data under this Agreement unless authorized herein or in writing by the owner.
 7. If the Parties exchange Data having a notice that the Receiving Party deems is ambiguous or unauthorized, the Receiving Party shall tell the Providing Party. If the notice indicates a restriction, the Receiving Party shall protect the Data under this Article unless otherwise directed in writing by the Providing Party.
 8. The Data rights herein apply to the employees and Related Entities of Partner. Partner shall ensure that its employees and Related Entity employees know about and are bound by the obligations under this Article.
 9. Disclaimer of Liability: NASA is not restricted in, or liable for, the use, disclosure, or reproduction of Data without a restrictive notice or for Data Partner gives, or is required to give, the U.S. Government without restriction.
 10. Partner may use the following or a similar restrictive notice .:

Proprietary Data Notice

The data herein include Proprietary Data and are restricted under the Data Rights provisions of Space Act Agreement [provide applicable identifying information].

Partner should also mark each page containing Proprietary Data with the following or a similar legend: "Proprietary Data – Use And Disclose Only Under the Notice on the Title or Cover Page."

B. Data First Produced by Partner Under this Agreement

If Data first produced by Partner or its Related Entities under this Agreement is given to NASA, and the Data is Proprietary Data, and it includes a restrictive notice, NASA will use reasonable efforts to protect it. The Data will be disclosed and used (under suitable protective conditions) only for U.S. Government purposes.

C. Data First Produced by NASA Under this Agreement

If Partner requests that Data first produced by NASA under this Agreement be protected, and NASA determines it would be Proprietary Data if obtained from Partner, NASA will mark it with a restrictive notice and use reasonable efforts to protect it for two years after

its development. During this restricted period the Data may be disclosed and used (under suitable protective conditions) for U.S. Government purposes only, and thereafter for any purpose. Partner must not disclose the Data without NASA's written approval during the restricted period. The restrictions placed on NASA do not apply to Data disclosing a NASA owned invention for which patent protection is being considered.

D. Publication of Results

The National Aeronautics and Space Act (51 U.S.C. § 20112) requires NASA to provide for the widest practicable and appropriate dissemination of information concerning its activities and the results thereof. As such, NASA may publish unclassified and non-Proprietary Data resulting from work performed under this Agreement. The Parties will coordinate publication of results allowing a reasonable time to review and comment.

E. Data Disclosing an Invention

If the Parties exchange Data disclosing an invention for which patent protection is being considered, and the furnishing Party identifies the Data as such when providing it to the Receiving Party, the Receiving Party shall withhold it from public disclosure for a reasonable time (one (1) year unless otherwise agreed or the Data is restricted for a longer period herein).

F. Copyright

Data exchanged with a copyright notice and with no restrictive notice is presumed to be published. The following royalty-free licenses apply:

1. If indicated on the Data that it was produced outside of this Agreement, it may be reproduced, distributed, and used to prepare derivative works only for carrying out the Receiving Party's responsibilities under this Agreement.
2. Data without the indication of F.1. is presumed to be first produced under this Agreement. Except as otherwise provided in paragraph E. of this Article, and in the Invention and Patent Rights Article of this Agreement for protection of reported inventions, the Data may be reproduced, distributed, and used to prepare derivative works for any purpose.

G. Data Subject to Export Control

Whether or not marked, technical data subject to the export laws and regulations of the United States provided to Partner under this Agreement must not be given to foreign persons or transmitted outside the United States without proper U.S. Government authorization.

H. Handling of Background, Third Party Proprietary, and Controlled Government Data

1. NASA or Partner (as Disclosing Party) may provide the other Party or its Related Entities (as Receiving Party):

- a. Proprietary Data developed at Disclosing Party's expense outside of this Agreement (referred to as Background Data);
 - b. Proprietary Data of third parties that Disclosing Party has agreed to protect or is required to protect under the Trade Secrets Act (18 U.S.C. § 1905) (referred to as Third Party Proprietary Data); and
 - c. U.S. Government Data, including software and related Data, Disclosing Party intends to control (referred to as Controlled Government Data).
2. All Background, Third Party Proprietary and Controlled Government Data provided by Disclosing Party to Receiving Party shall be marked by Disclosing Party with a restrictive notice and protected by Receiving Party in accordance with this Article.
 3. Disclosing Party provides the following Data to Receiving Party. The lists below may not be comprehensive, are subject to change, and do not supersede any restrictive notice on the Data.
 - a. Background Data:
 1. The Disclosing Party's Background Data, if any, will be identified in a separate technical document.
 - b. Third Party Proprietary Data:
 2. The Disclosing Party's Third Party Proprietary Data, if any, will be identified in a separate technical document.
 - c. Controlled Government Data:
 3. The Disclosing Party's Controlled Government Data, if any, will be identified in a separate technical document.
 - d. Notwithstanding H.4., NASA software and related Data will be provided to Partner under a separate Software Usage Agreement (SUA). Partner shall use and protect the related Data in accordance with this Article. Unless the SUA authorizes retention, or Partner enters into a license under 37 C.F.R. Part 404, the related Data shall be disposed of as NASA directs:
 4. None
 5. For such Data identified with a restrictive notice pursuant to H.2. including such Data identified pursuant to this Article, Receiving Party shall:
 - a. Use, disclose, or reproduce such Data only as necessary under this Agreement;
 - b. Safeguard such Data from unauthorized use and disclosure;
 - c. Allow access to such Data only to its employees and any Related Entity requiring access under this Agreement;
 - d. Except as otherwise indicated in 4.c., preclude disclosure outside Receiving Party's organization;
 - e. Notify its employees with access about their obligations under this Article and ensure their compliance, and notify any Related Entity with access about their obligations under this Article; and
 - f. Dispose of such Data as Disclosing Party directs.

I. Oral and visual information

If Partner discloses Proprietary Data orally or visually, NASA will have no duty to restrict, or liability for disclosure or use, unless Partner:

1. Orally informs NASA before initial disclosure that the Data is Proprietary Data, and
2. Reduces the Data to tangible form with a restrictive notice and gives it to NASA within ten (10) calendar days after disclosure.

ARTICLE 11. INTELLECTUAL PROPERTY RIGHTS - RIGHTS IN RAW DATA
GENERATED UNDER THE AGREEMENT

1. Raw Data

Raw data (i.e., unanalyzed data) and related Data produced under this Agreement is reserved to Principal Investigators (and Co-Investigators if any) named in this Agreement for scientific analysis and first publication rights for 2 months beginning with receipt of the Data in a form suitable for analysis. Subject to the provisions of the Intellectual Property Rights - Data Rights Article of this Agreement, NASA and Partner may also use the Data during the restricted period. This use will not prejudice the investigators' first publication rights.

2. Final Results

(a) Final results shall be made available to the scientific community through publication in appropriate journals or other established channels as soon as practicable and consistent with good scientific practice. Under the Publication of Results provision of the Intellectual Property Rights - Data Rights clause of this Agreement, the Parties shall coordinate proposed publications allowing a reasonable time for review and comment.

(b) NASA and Partner have a royalty-free right to reproduce, distribute, and use published final results for any purposes. Partner must notify publisher of NASA's rights.

ARTICLE 12. INTELLECTUAL PROPERTY RIGHTS - INVENTION AND PATENT
RIGHTS

A. "Related Entity" as used in this Invention and Patent Rights Article means a contractor, subcontractor, grantee, or other entity having a legal relationship with NASA or Partner assigned, tasked, or contracted with to perform activities under this Agreement.

B. The invention and patent rights herein apply to employees and Related Entities of Partner. Partner shall ensure that its employees and Related Entity employees know about and are bound by the obligations under this Article.

C. NASA has determined that 51 U.S.C. § 20135(b) does not apply to this Agreement. Therefore, title to inventions made (conceived or first actually reduced to practice) under this Agreement remain with the respective inventing party(ies). No invention or patent

rights are exchanged or granted under this Agreement. NASA and Partner will use reasonable efforts to report inventions made jointly by their employees (including employees of their Related Entities). The Parties will consult and agree on the responsibilities and actions to establish and maintain patent protection for joint invention, and on the terms and conditions of any license or other rights exchanged or granted between them.

ARTICLE 13. USE OF NASA NAME AND NASA EMBLEMS

A. NASA Name and Initials

Partner shall not use "National Aeronautics and Space Administration" or "NASA" in a way that creates the impression that a product or service has the authorization, support, sponsorship, or endorsement of NASA, which does not, in fact, exist. Except for releases under the "Release of General Information to the Public and Media" Article, Partner must submit any proposed public use of the NASA name or initials (including press releases and all promotional and advertising use) to the NASA Associate Administrator for the Office of Communications or designee ("NASA Communications") for review and approval. Approval by NASA Office of Communications shall be based on applicable law and policy governing the use of the NASA name and initials.

B. NASA Emblems

Use of NASA emblems (i.e., NASA Seal, NASA Insignia, NASA logotype, NASA Program Identifiers, and the NASA Flag) is governed by 14 C.F.R. Part 1221. Partner must submit any proposed use of the emblems to NASA Communications for review and approval.

ARTICLE 14. RELEASE OF GENERAL INFORMATION TO THE PUBLIC AND MEDIA

NASA or Partner may, consistent with Federal law and this Agreement, release general information regarding its own participation in this Agreement as desired.

Pursuant to Section 841(d) of the NASA Transition Authorization Act of 2017, Public Law 115-10 (the "NTAA"), NASA is obligated to publicly disclose copies of all agreements conducted pursuant to NASA's 51 U.S.C. §20113(e) authority in a searchable format on the NASA website within 60 days after the agreement is signed by the Parties. The Parties acknowledge that a copy of this Agreement will be disclosed, without redactions, in accordance with the NTAA.

ARTICLE 15. DISCLAIMER OF WARRANTY

Goods, services, facilities, or equipment provided by NASA under this Agreement are provided "as is." NASA makes no express or implied warranty as to the condition of any such goods, services, facilities, or equipment, or as to the condition of any research or

information generated under this Agreement, or as to any products made or developed under or as a result of this Agreement including as a result of the use of information generated hereunder, or as to the merchantability or fitness for a particular purpose of such research, information, or resulting product, or that the goods, services, facilities or equipment provided will accomplish the intended results or are safe for any purpose including the intended purpose, or that any of the above will not interfere with privately-owned rights of others. Neither the government nor its contractors shall be liable for special, consequential or incidental damages attributed to such equipment, facilities, technical information, or services provided under this Agreement or such research, information, or resulting products made or developed under or as a result of this Agreement.

ARTICLE 16. DISCLAIMER OF ENDORSEMENT

NASA does not endorse or sponsor any commercial product, service, or activity. NASA's participation in this Agreement or provision of goods, services, facilities or equipment under this Agreement does not constitute endorsement by NASA. Partner agrees that nothing in this Agreement will be construed to imply that NASA authorizes, supports, endorses, or sponsors any product or service of Partner resulting from activities conducted under this Agreement, regardless of the fact that such product or service may employ NASA-developed technology.

ARTICLE 17. COMPLIANCE WITH LAWS AND REGULATIONS

A. The Parties shall comply with all applicable laws and regulations including, but not limited to, safety; security; export control; environmental; and suspension and debarment laws and regulations. Access by a Partner to NASA facilities or property, or to a NASA Information Technology (IT) system or application, is contingent upon compliance with NASA security and safety policies and guidelines including, but not limited to, standards on badging, credentials, and facility and IT system/application access.

B. With respect to any export control requirements:

1. The Parties will comply with all U.S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 C.F.R. Parts 120 through 130, and the Export Administration Regulations (EAR), 15 C.F.R. Parts 730 through 799, in performing work under this Agreement or any Annex to this Agreement. In the absence of available license exemptions or exceptions, the Partner shall be responsible for obtaining the appropriate licenses or other approvals, if required, for exports of hardware, technical data and software, or for the provision of technical assistance.

2. The Partner shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of work under this Agreement or any Annex under this Agreement, including instances where the work is to be performed on-site at NASA and where the foreign person will have access to export-controlled technical data or software.

3. The Partner will be responsible for all regulatory record-keeping requirements associated with the use of licenses and license exemptions or exceptions.
4. The Partner will be responsible for ensuring that the provisions of this Article apply to its Related Entities.

C. With respect to suspension and debarment requirements:

1. The Partner hereby certifies, to the best of its knowledge and belief, that it has complied, and shall comply, with 2 C.F.R. Part 180, Subpart C, as supplemented by 2 C.F.R. Part 1880, Subpart C.
2. The Partner shall include language and requirements equivalent to those set forth in subparagraph C.1., above, in any lower-tier covered transaction entered into under this Agreement.

ARTICLE 18. TERM OF AGREEMENT

This Agreement becomes effective upon the date of the last signature below ("Effective Date") and shall remain in effect until the completion of all obligations of both Parties hereto, or five years from the Effective Date, whichever comes first.

ARTICLE 19. RIGHT TO TERMINATE

Either Party may unilaterally terminate this Agreement by providing thirty (30) calendar days written notice to the other Party.

ARTICLE 20. CONTINUING OBLIGATIONS

The rights and obligations of the Parties that, by their nature, would continue beyond the expiration or termination of this Agreement, e.g., "Liability and Risk of Loss" and "Intellectual Property Rights"-related clauses shall survive such expiration or termination of this Agreement.

ARTICLE 21. POINTS OF CONTACT

The following personnel are designated as the Points of Contact between the Parties in the performance of this Agreement.

Management Points of Contact

NASA Goddard Space Flight Center
Dr. Robert Petre
ASD Director
Mail Stop: 660

George Washington University
Sylvia A. Ezekilova
Executive Director, Sponsored Projects
Office of the V.P. for Research

8800 Greenbelt Road
Greenbelt, Maryland 20771
Phone: 301-286-3844
Fax: TBD
robert.petre-1@nasa.gov

1922 F Street NW, 4th Floor
Washington, DC 20052-0042
Phone: 202-994-6076
Fax: N/A
sezekils@gwu.edu

Principal Investigator Point of Contact

NASA Goddard Space Flight Center
Rita Sambruna
Deputy Director, Astrophysics Science
Division
Mail Stop: 660
8800 Greenbelt Road
Greenbelt, Maryland 20771
Phone: 301-286-3966
Fax: TBD
rita.m.sambruna@nasa.gov

GEORGE WASHINGTON
UNIVERSITY
Sylvain Guiriec, Ph.D.
Assistant Professor of Physics
725 21st Street NW (Rm 410)
Corcoran Hall
Washington, DC 20052-0058
Phone: 202-994-9180
Fax: sguiriec@gwu.edu

ARTICLE 22. DISPUTE RESOLUTION

Except as otherwise provided in the Article entitled "Priority of Use," the Article entitled "Intellectual Property Rights – Invention and Patent Rights" (for those activities governed by 37 C.F.R. Part 404), and those situations where a pre-existing statutory or regulatory system exists (e.g., under the Freedom of Information Act, 5 U.S.C. § 552), all disputes concerning questions of fact or law arising under this Agreement shall be referred by the claimant in writing to the appropriate person identified in this Agreement as the "Points of Contact." The persons identified as the "Points of Contact" for NASA and the Partner will consult and attempt to resolve all issues arising from the implementation of this Agreement. If they are unable to come to agreement on any issue, the dispute will be referred to the signatories to this Agreement, or their designees, for joint resolution. If the Parties remain unable to resolve the dispute, then the NASA signatory or that person's designee, as applicable, will issue a written decision that will be the final agency decision for the purpose of judicial review. Nothing in this Article limits or prevents either Party from pursuing any other right or remedy available by law upon the issuance of the final agency decision.

ARTICLE 23. MODIFICATIONS

Any modification to this Agreement shall be executed, in writing, and signed by an authorized representative of NASA and the Partner.

ARTICLE 24. ASSIGNMENT

Neither this Agreement nor any interest arising under it will be assigned by the Partner or NASA without the express written consent of the officials executing, or successors, or higher- level officials possessing original or delegated authority to execute this Agreement.

ARTICLE 25. APPLICABLE LAW

U.S. Federal law governs this Agreement for all purposes, including, but not limited to, determining the validity of the Agreement, the meaning of its provisions, and the rights, obligations and remedies of the Parties.

ARTICLE 26. INDEPENDENT RELATIONSHIP

This Agreement is not intended to constitute, create, give effect to or otherwise recognize a joint venture, partnership, or formal business organization, or agency agreement of any kind, and the rights and obligations of the Parties shall be only those expressly set forth herein.

ARTICLE 27. LOAN OF GOVERNMENT PROPERTY

The parties shall enter into a NASA Form 893, Loan of NASA Equipment, for NASA equipment loaned to Partner.

ARTICLE 28. SIGNATORY AUTHORITY

The signatories to this Agreement covenant and warrant that they have authority to execute this Agreement. By signing below, the undersigned agrees to the above terms and conditions.

NATIONAL AERONAUTICS AND
SPACE ADMINISTRATION
GODDARD SPACE FLIGHT CENTER

GEORGE WASHINGTON UNIVERSITY

BY: _____
Mark Clampin
Director of Sciences and Exploration

BY:  _____
Sylvia A. Ezekilova
Executive Director, Sponsored Projects

DATE: _____

DATE: 10/25/21 _____