ONR BAA/BAA Call/FOA Cover Page

Instructions:

1. **ONR BAA/BAA Call/FOA Cover Page: Performer must complete and submit this ONR BAA/BAA Call/FOA Cover Page with each grant white paper, contract white paper, and contract full proposal (new and resubmission).**
2. **Grant Full Proposals (new and resubmission): Use Grants.gov forms and submit via Grants.gov. Grant Full Proposals do not require an ONR BAA/BAA Call/FOA Cover Page.**
3. **ONR Tracking Number:**
   a. **Any new submission does not require an ONR tracking number.**
   b. **All other resubmissions require the ONR tracking number. ONR tracking number must be provided on all subsequent white paper or full proposal submissions.**
4. **Data Fields: All data fields below are required; except Performer tracking number and Co-Principal Investigator fields.**
5. **Non-US Performers: Cage Code and UEI data fields are optional. Please complete these data fields, if known.**

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1. New or Resubmission: New
2. Type of Submission: White Paper - New for Grant/Coop Agreement
3. ONR Tracking Number: _____
4. ONR BAA/BAA Call/FOA Number: N0001424SB001
5. ONR Program Officer/Point of Contract (POC)

   The ONR Program Officer/POC Name is either listed at the bottom of each ONR Technology and Research area webpage or within the BAA, BAA Call or FOA.

   First Name: Reza

   Last Name: Malek-Madani

   Email: reza.malek-madani.civ@us.navy.mil

6. ONR Program Officer/Point of Contract(POC) CODE: Code 311 - Mathematics, Computer and

   The ONR Program Officer/POC Name is either listed at the bottom of each ONR Technology and Research area webpage or within the BAA, BAA Call or FOA.

7. Project Title (100 Characters):

   New Models to Characterize and Predict Rare Events in Complex Physical Systems

8. Performer Tracking Number (Optional): _____

9. Performer Name: Nicholas Moore

10. Performer Address:

Colgate University Department of Mathematics
13 Oak Drive
Hamilton, NY 13346

11. United States Performer: Yes

12. Performer Cage Code: 381Q8

13. Performer UEI: D4P7H8NWZER7

14. Type of Business: Educational Institution

15. Performer Business POC:

First Name: Laura

Last Name: Festine

Email: lfestine@colgate.edu

Phone Number: 315-228-7456

16. Principal Investigator Name:

First Name: Nicholas

Last Name: Moore

Email: njmoore@colgate.edu

Phone Number: 919-636-1102

17. Co-Principal Investigator Name:

First Name: _____

Last Name: _____

Email: _____

Phone Number: _____

18. Rough Order of Magnitude (ROM)/Total Proposed Amount: 190,000

19. Project Duration (by months 24 months, 12 months, etc.): 36 months

20. Proposed Start Date: September 2024

21. Short Project Description (500 characters):

The objective of this proposal is to assemble new mathematical tools and models to characterize and predict rare events in complex physical processes of interest to the United States Navy. The physical processes include: (1) surface water waves, as they affect the theatre of the US Navy's operations; (2) thermal convection, as the driving force behind the ocean's large-scale circulation structure; (3) the earth's magnetosphere, as it underlies navigational systems.

22. Project Keywords (100 characters):

Rare and extreme events, dynamical systems, partial differential equations, numerical simulation

23. Will this effort contain Human, Animal, and/or Recombinant or Synthetic Nucleic Acid Molecules research? No

24. If yes, which type?