## U of Idaho Budget Justification

PI Zachariah B Etienne For Years 2-4 of the full 4-year proposal period

**Senior Personnel**: Funds are requested for 2 months of summer salary support for University of Idaho (UI) Institutional PI Zachariah B. Etienne in Years 2, and 1.5 months of support in Year 4. As UI Institutional PI, he will be in charge of the day-to-day management of the tasks charged to UI. To this end, he will work directly with the Graduate Assistant, the PI (Dr. R. Haas), and other external collaborators to ensure project goals are achieved according to the project timeline.

An anticipated 3% annual increase is included in all salary and tuition calculations, to account for inflation.

**Other Personnel**: We request funds for one Graduate Assistant (at the PhD level) for 12 months per year, starting in month 10 of Year 2. This student will, under the advisement of UI Institutional PI Etienne, be charged with carrying out the work as outlined in the Project Description. We include an anticipated 3% annual salary increase to account for inflation.

**Fringe Benefits:** Fringe benefits are added at 30.1% for the UI Institutional PI and 3.6% for the PhD student at UI.

**Equipment:** Funds for a research workstation for the PhD student are requested in Year 2 of the proposal period. This workstation will be used 100% toward the proposed research.

## Travel Direct Costs: Total: \$30,909. Anticipated 3% annual inflation above 2022 (Year 2) dollars is included for 2022 and 2023 (Years 3 and 4, respectively)

- \$3400 for Years 2022, 2023, and 2024: Graduate Assistant travels to the 2022 Einstein Toolkit 2-week workshop at NCSA
  - In 2022 dollars: \$650 round-trip airfare; \$2050 13 nights hotel; \$700 14 days per diem.
- \$3000 for Year 2022: PI travels to the 2022 April APS Meeting in NYC
  - In 2022 dollars: \$500 round-trip airfare; \$400 per diem; \$1200 hotel; \$550 conference registration; \$350 ground transportation & parking
- \$2000 for Year 2022: PI travels to NCSA to meet with Lead PI R. Haas
  - In 2022 dollars: \$700 round-trip airfare; \$950 6 nights hotel; \$350 7 days per diem.
- \$1600 for Year 2022: PI travels to Aspen Summer Workshop "Plasmas in Strong Gravity" for 2 weeks
  - o In 2022 dollars: \$850 registration fee; \$750 housing.
- \$2600/year in Year 2023 and Year 2024: PI and Graduate Assistant travel to the annual, 5 day North America Einstein Toolkit Workshop (domestic travel) for all years except the year it is hosted by UI:

- Per person, in 2022 dollars: \$500 round-trip airfare; \$600 5 nights hotel; \$200 5 days per diem.
- \$4000/year for Years 2023 & 2024: PI and Graduate Student attends April APS Meeting (5-day trip)
  - In 2022 dollars, for both people combined: \$700 registration; \$350 ground transportation & parking; \$1150 hotel; \$800 per diem; \$1000 round-trip airfare

**Participant Support Costs**: Participant support is requested for summer 2022, during which U of Idaho will host a 5 day Einstein Toolkit Workshop. Such workshops typically draw 30–40 participants, of whom most are graduate students. Participant support costs will be reserved primarily for travel, lodging, and per diem for non-UI graduate and undergraduate students participating in the 2022 Workshop, with lower priority given for participating non-UI senior researchers. Costs will be provided as a reimbursement stipend, with per-participant stipend amount depending on travel cost, with the restriction of economy airfare and modest lodging. Average stipend per participant will be \$750, with 20 participants in total.

**Other Direct Costs**: Tuition remission for the PhD student has been included in Year 2023 and 2024 at a rate of 11,778 per academic year in Year 2022 dollars. A 3% increase due to inflation has been included in Years 2023 and 2024.

**Indirect Costs**: We include an F&A rate of 50% for years 2 and 3 of the proposal, and the second part of year 1. In year 1, the F&A rate is 48.5% until June 30, and the budget has been prorated accordingly. These are the federally negotiated rates for the University of Idaho.