BUDGET JUSTIFICATION

Senior Personnel:

The PI (Hogg) is requesting 1 month of summer salary of this project. He is responsible for the overall management of the project at NYU and supervision of the NYU personnel. He will recruit and train the graduate research assistants, supervise the research and the writing of scientific papers, lead in the writing of the pedagogical materials, and organize and lead the hack days and tutorials.

Other Personnel:

Graduate Research Assistant (GRA): Funds are requested for 2 GRAs; one for a full calendar year and the other for only summer support. The GRAs will execute and write up the research projects. They will also participate in the pedagogical events.

Fringe Benefits Rate:

The fringe benefits rate is set at 28.5% and applies only to the PI salary.

Capital Equipment:

Funds are requested for a data and compute server for the execution of the computational components of the proposed program. \$21,800 is the current quotation at Dell for a system with two CPUs (a total of 24 cores), 384 GB of RAM, and 84 TB of storage.

Domestic Travel:

Funds are requested for attendance at two domestic scientific meetings or pedagogical events per PI per year and one per GRA per year. We have budgeted \$6,000 in Year 1 for 4 4-day domestic trips (including \$200 for registration fees, \$500 for airfare, \$150/day for food and lodging, and \$200 for miscellaneous expenses), increasing per year according to University policy.

Foreign Travel:

Funds are requested for attendance at one international meeting or event per year for a GRA. In Year 1 we have budgeted \$2,000 for a 5-day international trip including \$200 for registration fees, \$850 for airfare, \$150/day for food and lodging, and \$200 for miscellaneous expenses), increasing per year according to University policy.

Publications:

Page charges for an average of two 10-page scientific publications (roughly 20 pages) per year are requested. The results will be published in *The Astrophysical Journal* or equivalent.

Other direct costs:

Graduate students receive tuition remission charged at 37% of graduate student stipend.

Indirect Costs

Personnel salaries (excluding those of graduate students) and OTPS costs increase 2.5% annually. The indirect cost rate negotiated with DHHS, agreement dated 8/19/2014, states a rate of 58.5%. The MTDC base excludes capital equipment over \$3,000, tuition remission, and subcontracts beyond the first \$25,000.