Budget Justification

We request in this proposal funds for the purchase of a cluster of fifty, dual-CPU, computers supported by 5.0 terabyte of disk storage and associated hardware and software to increase the productivity of our research efforts at the University of Richmond and to train our undergraduates in modern analysis methods. Detailed specifications for the proposed cluster may be found in Section 3.4 of this proposal and in the attached price quote from Linux Labs International.

The proposed instrument will be used by the faculty and students in the University of Richmond nuclear and astrophysics groups. Undergraduates will be intimately involved in the use of the proposed system. The University of Richmond's primary mission is undergraduate education (there are no graduate students in the Physics Department) and the University is committed to research involving undergraduates as a means to broaden our students education beyond the scope of the classroom. In recent years we have routinely had 5-6 students each summer involved in nuclear and astrophysics. The proposed instrument will make their research (and the faculty's) more productive and will train them on the most modern physics instruments. Sections 3.2 and 3.3 of this proposal show that this cluster will enable us to achieve our proposed science goals.

In addition to the cluster itself, a small amount of funding is requested for miscellaneous supplies (cables, etc.) required for the cluster.