TOWN MEETING RESOLUTION 1 (Draft)

The opportunities for nuclear physics provided by high performance computing and partnerships with computer science and applied mathematics are unprecedented. The Town Meeting strongly endorses the vision stated in the recent NAS report "Nuclear Physics: Exploring the Heart of Matter":

"High performance computing provides answers to questions that neither experiment nor analytic theory can address; hence, it becomes a third leg supporting the field of nuclear physics."

TOWN MEETING RESOLUTION 2 (Draft)

The Town Meeting strongly supports the recommendation of the NAS report:

*"Recommendation: A plan should be developed within the theoretical community and enabled by the appropriate sponsors that permits forefront computing resources to be **exploited** by nuclear science researchers, and establishes the infrastructure and collaborations needed to take advantage of exascale capabilities as they become available."*

TOWN MEETING RECOMMENDATION 1 (Draft)

The nuclear physics community should work with DOE and NSF to increase funding for the NP SciDAC programs and other cyber-related initiatives, and to foster partnerships with ASCR, NNSA, OCI, and other agencies to strengthen the impact of these programs. In addition to enabling new physics, these partnerships also open new avenues in the areas of computer science and applied mathematics.

TOWN MEETING RECOMMENDATION 2 (Draft)

Collaboration amongst the fields of computational nuclear physics, experimental nuclear physics and analytic theory is critical. In particular, new experimental initiatives should be integrated with large-scale theoretical computations to maximize the combined science output.

TOWN MEETING RECOMMENDATION 3 (Draft)

Concrete steps should be taken to educate and train the next generation of computational nuclear physicists, and to increase the cross-fertilization between the various efforts, exploiting synergies in physics, computer science and applied mathematics. The options include, but are not limited to: computational nuclear physics meetings, workshops, and schools; enhanced connections between SciDAC projects; and student exchanges.