

## NASA's Laboratory Astrophysics Workshop: Opening Remarks

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### 1. Introduction

The Astronomy and Physics Division at NASA Headquarters has an active and vibrant program in Laboratory Astrophysics. The objective of the program is to provide the spectroscopic data required by observers to analyze data from NASA space astronomy missions. The program also supports theoretical investigations to provide those spectroscopic parameters that cannot be obtained in the laboratory; simulate space environment to understand formation of certain molecules, dust grains and ices; and production of critically compiled databases of spectroscopic parameters.

NASA annually solicits proposals, and utilizes the peer review process to select meritorious investigations for funding. As the mission of NASA evolves, new missions are launched, and old ones are terminated, the Laboratory Astrophysics program needs to evolve accordingly. Consequently, it is advantageous for NASA and the astronomical community to periodically conduct a dialog to assess the status of the program. This Workshop provides a forum for producers and users of laboratory data to get together and understand each others needs and limitations. A multi-wavelength approach enables a cross fertilization of ideas across wavelength bands.

### 2. NASA's Office of Space Science Strategic Planning Process

The Workshop is timely, because the Office of Space Science (OSS) is currently in the process of preparing its new strategic plan. The process can be summarized as follows:

- 1) The National Academy of Science identifies the scientific priorities for astronomy and astrophysics every ten years.
- 2) OSS prepares strategic plan every three years as input to congressionally mandated NASA strategic plan.
  - a) Space Science Advisory Committee (SScAC) is responsible for OSS strategic plan.
  - b) Each subcommittee of the SScAC receives community input (e.g., workshops, working group reports, professional society meetings, etc.) to prepare roadmap for its science theme within context of National Academy recommendations.
  - c) Roadmaps are submitted to SScAC for incorporation into OSS Strategic Plan.
- 3) OSS Performance Plan and metrics are prepared annually based on Presidents budget.
- 4) OSS Performance Report is prepared based on evaluation by SScAC and NASA Advisory Council.

### **3. OSS Advisory Structure (governed by Federal Advisory Committee Act)**

Community advice to OSS is provided through its advisory committees. The top level committee, the Space Science Advisory Committee advises the Associate Administrator for Space Science. The SScAC has four subcommittees, each of which represents the four science themes within OSS. Each subcommittee provides advice to the OSS Science Director responsible for the theme. The two subcommittees relevant to Astronomy and Physics are the Origins Subcommittee, and the Structure and Evolution of the Universe Subcommittee.

### **4. Workshop Outcome**

The Scientific Organizing Committee (SOC) will distil the ideas discussed and debated in this Workshop into a concise White Paper. The objective of the exercise will be to clearly enunciate NASA's Laboratory Astrophysics needs for past and current missions, and to identify those for future missions. Broad areas of research required in the laboratory, theoretical computations and modeling should be identified as should the needs for maintaining critically compiled databases. The White Paper should be a valuable resource to scientists proposing to the Laboratory Astrophysics program, as well as to funding agencies in their budget planning process.