Dear COR community members,

Each year, NASA's Cosmic Origins (COR) Program prioritizes technology areas requiring investment to mature technologies needed for strategic COR science missions. The Strategic Astrophysics Technology (SAT) program funds projects that mature such technologies, usually from Technology Readiness Levels (TRLs) of 3 or 4 toward TRLs of 5 or 6, at which point they can be infused into future flight projects.

To ensure the SAT program funds the right technologies, we depend on you, the COR community, to identify the technology gaps between today's state of the art and what will be needed to fly strategic COR missions. Strategic missions are those identified as such by the Decadal Survey, the Astrophysics Implementation Plan and the Astrophysics Roadmap, "Enduring Quests, Daring Visions" (both available from NASA Astrophysics), and other relevant documents.

We want to hear what you think are the most important areas for technology development. If you know of a technology gap, please download a "technology gap submission form" from the COR technology webpage, fill it out according to the instructions at the top of the form, and email the completed entry (or any questions) to Thai Pham by June 1, 2017. Gaps submitted by the cutoff date will be compiled with last year's list and forwarded to the COR Program Analysis Group (COPAG) Executive Committee (EC). The EC will ask the COPAG's Technology Interest Group (TIG) to add missing gaps if they identify key technologies not addressed in the list, merge gaps with large overlaps, and optimize entry wording and accuracy as needed to make gaps as compelling as possible. The COPAG EC will then review the revised list, and send it back to the Program Office by June 30.

This year, the Large UV/Vis/IR (LUVOIR) Surveyor and Origins Space Telescope (OST) Science and Technology Study Teams (STDTs) are expected to update their gaps lists. To inform the study teams, minimize their effort, and facilitate gap prioritization by the COR Technology Management Board (TMB), we will forward to the teams any edits to said gaps proposed by the community. The study teams will consider such edits, implementing those they deem helpful, and submit their updated lists to the Program Office by June 30. The Program Office will then merge those with the one we receive from the EC. In early August, the TMB will prioritize the gaps in the combined list. We publish the priority results in October in our Program Annual Technology Report (PATR). NASA's Astrophysics Division uses these priority recommendations to inform its SAT solicitations and selection, and NASA's Space Technology Mission Directorate references them for investment planning as well.

The PATR describes the Program's technology management activities and the technology development progress over the previous year. The PATR lists technology gaps prioritized that year, the criteria used to prioritize them, and gap priorities. The PATR also announces any new SAT projects selected for funding of those submitted in response to the prior year's SAT solicitation. We encourage you to read the 2016 COR PATR to see which gaps received high priority, and which ones were funded, to inform your new entry. Since we already plan to reevaluate all entries from last year's list, please resubmit those only if you want to update or change any information from the 2016 gaps list, in the PATR. You can find more details in the above-mentioned COR technology webpage.

Whether you develop cutting-edge technology or use such technology to expand our understanding of the universe, we encourage you to visit our website, read the PATR, and tell us what you think about the COR Program, our process, and how we can improve them. This is your opportunity to take an active role in shaping the future of COR technology, and through that, COR science.

Best wishes,

Thai Pham, COR Program Technologist

Susan Neff, COR Chief Scientist