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European Space Astronomy Centre  
Camino bajo del Castillo, s/n  
28692 Villanueva de la Canada  
Madrid  
Spain  
T +34 91 8131 100  
F +34 91 8131 139  
www.esa.int

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**Subject: NewAthena Science Re-Definition Team**

Dear Colleague,

The Scientific Programme is a backbone of ESA. It empowers Europe to lead in key areas of space science and technology, manifested by the ever-growing scientific output of our missions. By necessity, the Scientific Programme has to trade off the ambition and cost of each individual flagship mission with the goal to maintain Programme diversity and to achieve a high cadence of missions, allowing all scientific communities and Member States served by the Programme to pursue their objectives.

This trade off is in the hands of the Scientific Programme Committee (SPC), and in early June the Executive (i.e. the Director of Science and his team) has consulted the SPC on the matter of cost increases in the upcoming flagship missions Athena and LISA. The SPC has unanimously stated their wish that the two missions not go forward at the current cost level. They have expressed their desire to see a Programme comprising both Athena and LISA with an ambitious performance but at an affordable cost. Affordability implies a reduction in the projected cost of Athena of about 1/3 with respect to the current value, and a cost for LISA roughly equal to the revised cost of Athena.

The Executive has thus started an exercise, together with the Athena stakeholders, to define a mission configuration that preserves, insofar as possible, the existing investments (and thus has both a wide-field imaging instrument and a high-energy cryogenic spectrograph, on the back of a large silicon pore optics mirror), but with a simplified configuration and thus a lower cost. However, the performance and goals should qualify as flagship class. This mission configuration is tentatively dubbed NewAthena.

The interaction with the scientific community to define this innovative mission concept will take place through two different channels: on the one hand, the Executive is already interacting directly with the leads of the two current Athena instruments (the WFI camera and the X-IFU spectrograph), to investigate if and what simplifications can be considered in the design and configuration of the instruments. On the other hand, to have an independent assessment of the scientific capabilities of the new mission configuration, we have opened an Announcement of Opportunity for membership in the new team called the NewAthena Science Re-Definition Team. This team will provide recommendation concerning the possible tradeoffs between performance, complexity, cost, etc. but also address new, emerging scientific topics that were not yet developed when the original Athena science case was

defined. In the meanwhile, the existing Athena Science Team, which comprised both the instrument teams and a number of independent scientists, is being dissolved. The Executive will continue to interact with the two instrument consortia directly, and separately from the Science Re-Definition Team.

All interested scientists without a current management role in the instrument consortia are invited to consider applying to become part of the NewAthena science assessment team, regardless of their having been previously involved in the Athena Science Team.

The Executive has prepared a White Paper detailing the way forward for Athena with the SPC, with the consortia behind the Athena instruments, and with the Athena Science Team. The [White Paper](#) is available to all interested stakeholders.

It's clear that the current developments create turbulence for the large and active community backing the Athena mission, which has invested time and resources in the preparation of the mission and that if the Programme's resources allowed, would have gone forward in its present configuration. However financial constraints need to be folded in the definition of any space mission, and flagship missions like Athena and LISA are no exceptions. I trust that through the current exercise, however difficult, the new Science Programme's flagship, NewAthena, will emerge to achieve ambitious scientific goals.

With best regards,

Prof. Günther Hasinger

ESA Director of Science