

ESA L3 Gravitational Wave mission – UKSA requirements for UK applicants wishing to contribute to the development of instrumentation or data processing capabilities

ESA has selected the science theme of ‘The Gravitational Universe’ for the third Large-Class (L3) mission in its Cosmic Vision space science programme, with a foreseen launch date of 2034. ESA has confirmed laser interferometry as the baseline for L3 and, through its Gravitational Wave Working Group, is currently working to define a reference baseline for the overall mission design, and for potential participation by Member States and other international partners.

The UK Space Agency now invites applications for financial support from UK interested parties wishing to contribute to the development of the instrumentation or the data processing capability for L3.

All potential applicants should e-mail an initial expression of interest, by no later than Wednesday 17 August to: caroline.harper@ukspaceagency.bis.gsi.gov.uk with a brief statement of the proposed nature of involvement, and the names and affiliations of those who would be involved. This is to enable us to manage any potential conflicts of interest in the assessment process. Please send just one email per application (not one email for each individual involved in each application).

Applicants must also submit the following information by email to Caroline Harper at the above address, and copy to ryan.king@ukspaceagency.bis.gsi.gov.uk, by no later than 5 September.

- A Statement of Interest (available at: <https://www.gov.uk/guidance/apply-for-funding-academic-community-and-educational#statement-of-interest-to-outline-a-new-project>) which must include the estimated cost to launch assuming a launch date in 2034, together with;
- a brief description of the UK roles and responsibilities, including involvement in the instrumentation, how this relates to the scientific requirements and objectives, the UK access with regards to data and community involvement (2 pages maximum).
- a brief description of how the proposal team will handle staff succession planning, given the long development phase of this mission, to ensure that there will be leadership, and a team, with the necessary expertise to deliver the project over its entire duration, including a post-launch operational phase of at least 5 years (1 page maximum);
- a brief description of the technology development required with indicative Technology Readiness Levels included (2 pages maximum);
- a description of the benefits to the UK of your proposed involvement, including scientific return and economic impact (2 pages maximum).

Proposals will be assessed to inform the UK Space Agency’s future planning for L3, and to influence the content of our involvement in the next ESA Gravitational Wave working group meeting in mid-September. While not making any binding commitments at this stage, the Agency wishes to be clear about its priorities on L3 to ensure that UK interests are represented appropriately. The Science and Technology Facilities Council (STFC) Science Board is being asked to advise the UK Space Agency on the priority and timeliness of a gravitational wave mission in general. The UK Space Agency’s Science Programme Advisory Committee (SPAC) will provide the UK Space Agency with

recommendations on the proposals we receive, using the STFC advice and the established SPAC assessment criteria (available at: <https://www.gov.uk/guidance/apply-for-funding-academic-community-and-educational#statement-of-interest-to-outline-a-new-project>).

Summary of key dates:

Email to UK Space Agency with indicative involvement	17 August 2016
Submission of proposals (SoI plus supporting information as above)	5 September 2016
Review of science case by STFC	August –early September 2016
SPAC review of proposals	Early September 2016
ESA Gravitational Wave Working Group	16 September 2016