



Ref: 15/JAXA/ISAS/No.1117001

November / 8 , 2015

Re: SPICA MDR results

Dear Colleagues,

This letter is to let you know that the re-designed mission definition of SPICA, equipped with a large and cooled telescope to enable a new era of space IR astronomy to open in the 2020's, has passed its Mission Definition Review (MDR) at ISAS, JAXA. Full priority has been given to realism during the re-designing study and the review results indicate that a 2.5m telescope, although smaller than the one that had been day-dreamed, is indeed capable of expanding the horizon of space IR astronomy. I would like to thank the relevant international community helping us to arrive at this point, because a joint study with European colleagues was crucial in identifying the realistic limit of the telescope size, and because the recommendation issued by the International Review Committee did help substantially in re-focusing the science objectives of the mission.

The goal of SPICA is to reveal the process that enriched the Universe with metal and dust. Spectral features in mid/far IR, namely, the rich dust bands and gas emission lines that can be accessed by SPICA are the most powerful tools for the purpose. SPICA will unveil the detailed processes in galaxy formation and evolution up to $z=3$ or even beyond, and also reveal the evolutionary process of protoplanetary systems that is the key to understand the formation of the planets as we see today. Synergy with other large facilities such as ALMA and ATHENA is nicely foreseen.

I, as the Director General of ISAS, do care about timeliness and solid materialization of space science missions. I see that the new shape of SPICA does meet these conditions. On the other hand, I am aware that the international community needs to clear yet more hurdles before SPICA is materialized. Here let me declare that ISAS is ready to support international efforts along the direction of making SPICA happen. Indeed ISAS has decided to form an International Science Advisory Board which will help to keep SPICA in its best shape. Its function as of now is to oversee the activities at ISAS but future evolution is naturally expected as SPICA moves ahead.

Sincerely,

A handwritten signature in black ink, reading "Saku Tsuneta". The signature is written in a cursive, flowing style.

Saku Tsuneta

Director General, ISAS/ JAXA