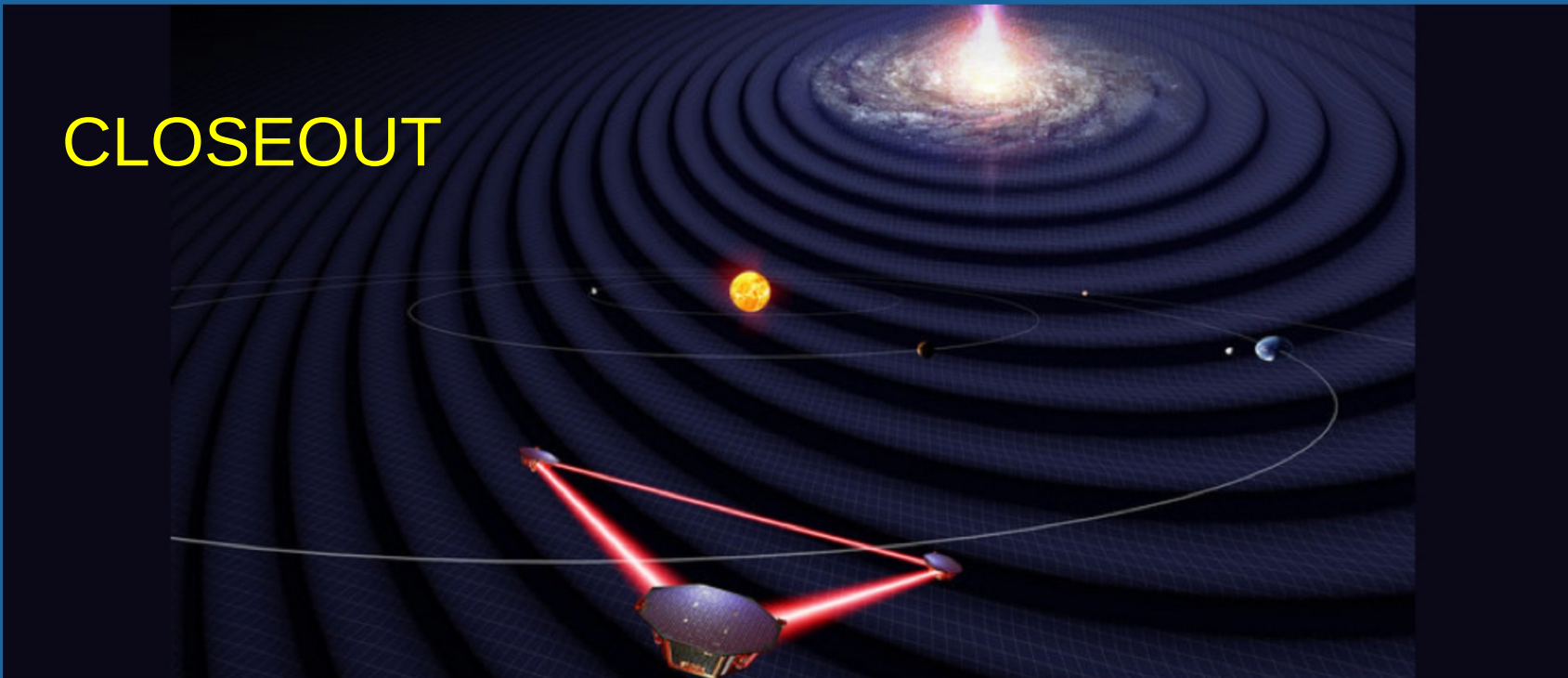


CLOSEOUT



LISA CANADA Workshop 2022

Aug 24 – 25, 2022

Remote

US/Pacific timezone



Scott Oser, on behalf of the workshop organizers

Thank you!

- Tremendous thanks to all of the presenters for their wonderful insights on LISA science!
- Special thanks to the young presenters in the LISA Lightning Round session

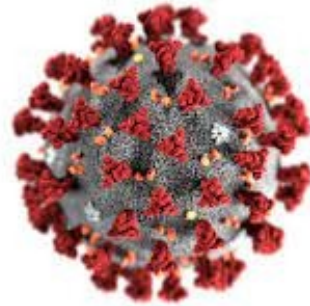
LISA Canada 2020?

The idea of organizing a workshop to explore Canadian participation in LISA was first tossed around in February 2020 ...

LISA Canada 2020?

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Very bad timing



LISA Canada 2021

- Eventually we got our feet under ourselves, and realized that there were already several disparate groups working on or interested in LISA who didn't know about each other.
- This led to the LISA Canada 2021 workshop, featuring a broad overview of many parts of the mission and activities of the consortium. Slides are posted on the website:

<https://meetings.triumf.ca/event/220>

YouTube recordings of most of last year's talks are also available (next slide)

Recordings of LISA Canada 2021

- Workshop Introduction (Jess McIver): https://www.youtube.com/watch?v=P_dUYB-EgT8
- LISA Science Overview (Kelly Holley-Bockelmann): <https://www.youtube.com/watch?v=Vrli-6Tpx3Y>
- LISA Detector Overview (William Weber): <https://www.youtube.com/watch?v=fb0vpAwde6g>
- LISA Astrophysics Working Group (Shane Larson): <https://www.youtube.com/watch?v=DVaPbXUmC2Q>
- LISA Consortium Overview (Nelson Christensen): https://www.youtube.com/watch?v=90gQ_3mUfLI
- LISA Data Challenge Working Group (Nikolaos Karnesis):
<https://www.youtube.com/watch?v=BaBkQ8snODs>
- LISA Parallel Session A (Observations/Instrumentation): <https://www.youtube.com/watch?v=PlrbfloGF44>
- LISA Parallel Session B (Theory): <https://www.youtube.com/watch?v=TPsowHlayhk>
- Workshop Discussion Summary and Closeout: <https://www.youtube.com/watch?v=i-zsUtCKch4>

New LISA schedule, tbc

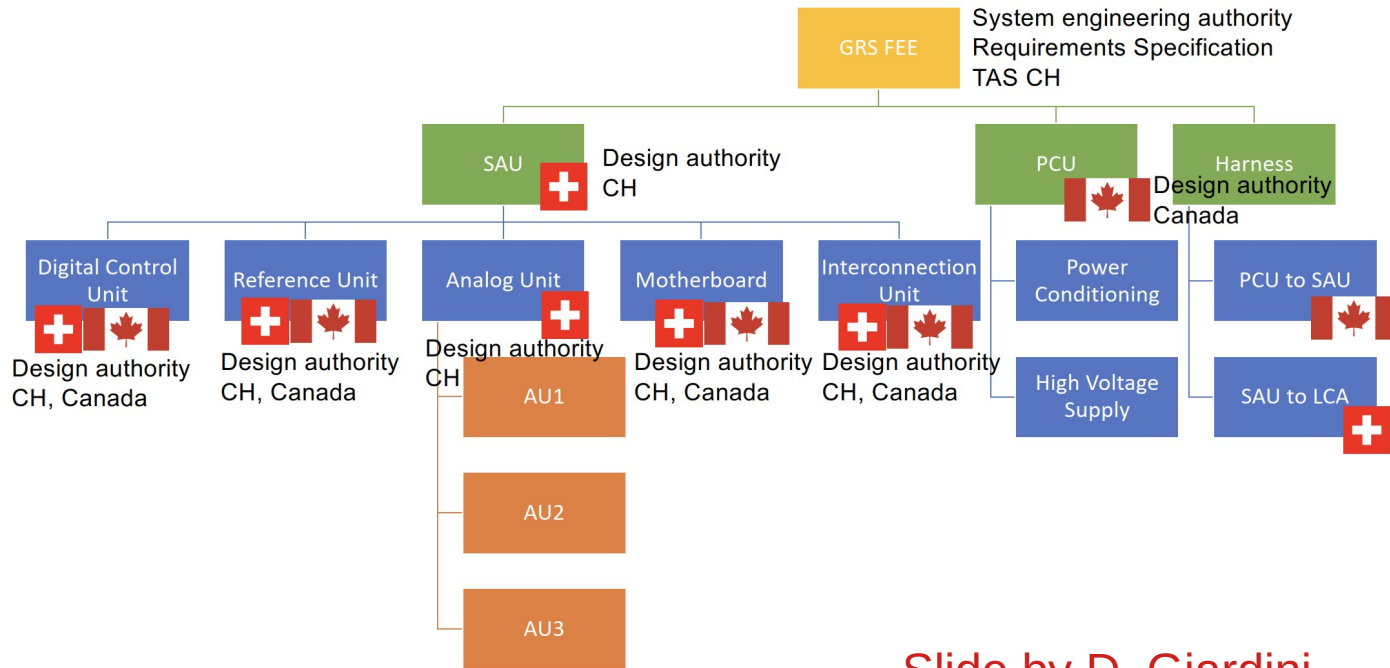
- Athena to be redesigned and descoped, MA delayed
- Target LISA MA anticipated to Nov 2023, target launch 2035
- For MA, payload and platform hardware must be at TRL5/6 and system design must be mature, and Cost-at-Completion must fit within the Science Programme
- Agreements and documents needed before Mission Adoption:
 - ✓ Science Management Plan (SMP)
 - ✓ Multi-Lateral Agreement (MLA)
 - ✓ Memorandum of Understanding (MoU)
 - ✓ Design Definition Report (aka Red Book)

ESA has
moved
planned
mission
adoption for
LISA *earlier*
(Fall 2023)!!!

Slide by D. Giardini



Project setup for the baseline option for Canadian contribution



Slide by D. Giardini



Opportunity for Canadian Hardware Contribution to LISA

CESW 2022
High Energy Astrophysics
Breakout Session
Scott Oser (UBC)

Opportunity for Canadian contribution

The Swiss LISA team, with support from LISA management and ESA, recently contacted the Canadian LISA PIs and proposed that Switzerland and Canada share responsibility for front-end electronics for the GRS. We've passed this suggestion on to contacts at CSA.

The Swiss came with specific suggestions how to divvy up the work, and an approximate cost estimate of ~\$20M. The work is most suitable for Canadian aerospace industrial partners.

ESA has already approved LISA, and Canada is the only non-European cooperating state in ESA, making Canadian participation 'straightforward', assuming that finances allow.

CSEW 2022

Three of four space astronomy topical teams at CSEW listed LISA as a top priority for Canada.

There is an opportunity, but also a challengingly short time window to make it happen.

Stay Involved

- If you haven't already done so, register your interest in Canadian participation in LISA at

tinyurl.com/lisacanada

- Contact the workshop organizers directly if you are interested in helping to organize future LISA Canada workshops
- Contact us ASAP if you are interested in the proposed hardware contribution.
- Join the LISA consortium: <https://signup.lisamission.org/signup>

An upcoming workshop of interest

LISA data analysis: from classical methods to machine learning

<https://indico.in2p3.fr/event/27706/>

The End