

**SPEAKING NOTES FOR****Lia Merminga****ARIEL Project Co-Leader and Head, Accelerator Division, TRIUMF**

(check against delivery)

Thank you, Reiner.

Esteemed Guests, dear Colleagues,

The moment we have dreamt for a long time has finally come. On behalf of the ARIEL Team and the entire TRIUMF community, I want to thank all of you who have helped realize our dream:

The University of Victoria, the Government of Canada, the Canada Foundation for Innovation, the Government of British Columbia, TRIUMF staff including Shane Koscielniak, the e-linac project leader, and the global scientific community.

We feel the responsibility entrusted upon us to build and deliver a research facility that is unparalleled in the world.

ARIEL, the Advanced Rare Isotope Laboratory, when complete, will deliver unprecedented intensities of rare, short-lived exotic isotopes, and in particular those with extreme neutron excess, for simultaneous and multiple experiments for Science and Medicine.

Using “Made in Canada” superconducting accelerating technology, ARIEL will triple TRIUMF's capabilities for producing beams of rare isotopes and will expand the range of isotopes produced.

- ARIEL will produce elements that exist only rarely in our universe, even rarer than gold or platinum, and yet have been essential for the formation of our solar system. These isotopes will be used to study the nature of stars, the origin of the elements, and how complex patterns arise from relatively simple building blocks. These elements will shed light into our understanding of fundamental laws of nature.
- ARIEL will enable the unique magnetic-nanoprobe laboratory already in operation at ISAC to become a user facility that will attract many research groups from around the world to study new materials and magnetism in a way that propels new breakthroughs in superconductivity, spintronics, and energy storage.
- ARIEL will demonstrate accelerator-based technologies both for making conventional medical isotopes and for uncovering the medical isotopes of the future, especially those targeted at therapy.

Mindful of the environment, ARIEL is not only designed to have a modest carbon footprint, but to also contribute its excess heat back to the neighbourhood community in the south campus.

Our path to completion of ARIEL, which extends beyond the next 18 months of construction, will be arduous and we will need your support along the way. But we are up to the task, and the results will be worth it:

A research facility that advances our understanding of the universe and the fundamental laws that govern it, that enables the advanced treatments of disease, and makes the world a better place to live in.

A research facility that is unique in the world and is designed to remain a relevant and vibrant scientific facility for 40 years to come, just as the original cyclotron builders succeeded.

A facility that all Canadians can be proud of.

Thank you.