

## PHYSICS AND ASTRONOMY SEMINAR

(In-person & Online)

## Dr. Alan McConnachie NRC Herzberg

## "Astronomy Technology Development, Opportunities and Collaboration at the Herzberg Research Center"

The Herzberg Astronomy and Astrophysics Research Center is involved in a large number of instrumentation and technology development projects for Canada's current and future astronomical observatories, including the Gemini Observatories, the Canada-France-Hawaii Telescope, the Atacama Large Millimeter Array, the Thirty Meter Telescope, the Square Kilometer Array and the Next Generation Very Large Array. The science goals of these instruments ranges from the search for life on other planets and the chemical evolution of the Universe, to the formation of stars and galaxies and the nature of dark matter. Technical expertise spans the relevant engineering and design disciplines, including software, optical design, adaptive optics, mechanical engineering, receiver development, signal processing, machine learning, and electronic engineering. HAA is part of the National Research Council, and is highly collaborative, with Universities, with other NRC research centers, with industry and with international partners. Here, we discuss new and potential collaborative opportunities with HAA, particularly as they relate to numerous research and development activities that support our broader program. The ultimate goal of these activities is to help position and maintain HAA, Canadian University partners, and Canadian industry, at the forefront of the development of next generation technologies to enable astronomy and astrophysics into the next decade and beyond.

> Friday, October 22, 2021 12:00pm PDT Clearihue room A224