



IEEE Okanagan Subsection

Presents

Dr. Bruce Veidt

Senior Designer / Design Engineer
Dominion Radio Astrophysical Observatory
NRC - Herzberg Institute of Astrophysics

Phased-Array Feeds for Future Radio Telescopes



Date: Tuesday, November 30

Time: 4:30pm – 5:30pm

Place: UBC Okanagan, Room ART 103

Talk Abstract:

Before the end of this decade, construction will begin on a new international radio telescope called the Square Kilometre Array. This telescope will survey much of the visible sky with unprecedented sensitivity, enabling exploration of the early universe. To cover large areas of the sky requires new technologies to expand the field of view of telescopes. This presentation will discuss development of low-noise phased arrays placed at the focal planes of reflector antennas as a means of obtaining wide fields-of-view.



IEEE Okanagan Subsection

Speaker Biography:

Bruce Veidt received the Bachelor of Science degree in Electrical Engineering from the University of Alberta in 1981. For his Master degree thesis he developed a second observing band for the Synthesis Telescope at the Dominion Radio Astrophysical Observatory in Penticton, Canada. After graduation he joined the technical staff of the Caltech Submillimeter Observatory in Pasadena, California. After returning to Canada he worked in the field of biomedical research for several years before returning to the University of Alberta for Ph.D. studies involving millimeter wavelength receivers based on superconducting tunnel junctions. Since 1996 he has worked at the National Research Council of Canada on the development of future radio telescopes, in particular the Square Kilometre Array.