

Title: Multi-GNSS Precise Point Positioning

Presented by: Ryan M. White

Date: March 14, 2017

Time: 1:00 PM

Location: Head Hall, Room C-10

Description: Precise Point Positioning (PPP) is one of the existing techniques used to estimate user position from GNSS observables. While similar in many ways to post-processed static and real-time kinematic differential GNSS positioning, PPP differs in ways that may offer certain distinct advantages to the land surveyor. In this presentation, a brief overview of the standard PPP algorithm will be discussed as will a comparison of similarities and differences between it and other GNSS positioning techniques. A review of multi-GNSS PPP will be presented including difficulties associated with its implementation. Finally, a practical example of the performance improvements associated with multi-GNSS PPP will be shown.

Presenter: Ryan M. White is a Ph.D. candidate in the Department of Geodesy and Geomatics Engineering at the University of New Brunswick in Fredericton, New Brunswick, Canada. As part of the department's Geodetic Research Laboratory and a member of the GNSS Analysis and Positioning Software (GAPS) Development Team, his current research focuses on the enhancement of multi-GNSS precise point positioning algorithms as well as precise position, velocity, and acceleration determination of the GPS Attitude, Positioning, and Profiling (GAP) instrument for the e-POP platform on the Canadian CASSIOPE small satellite.