

**CARLETON UNIVERSITY**  
Department of Mechanical and Aerospace Engineering  
PhD Comprehensive Exam and Thesis Proposal Defense

**CANDIDATE:** Simon Festa-Bianchet

**DATE:** Friday November 25, 2022, 2:00 p.m. via Video Conference

**THESIS TITLE:** **Design and Application of a Novel Optical Methane Flow Sensor to Quantify Methane Vent Sources at Upstream Oil and Gas Sites**

**EXAMINATION BOARD:**

**Member of Department** R. Kholghy, Dept. of Mechanical & Aerospace Engineering

**Member of Department** J. Liu, Dept. of Mechanical & Aerospace Engineering

**Chair of Defence** K. Schell, Dept. of Mechanical & Aerospace Engineering

**Thesis Supervisor** M. Johnson, Dept. of Mechanical & Aerospace Engineering

**Chair of Department** R. Miller, Chair, Dept. of Mechanical & Aerospace Engineering (*Ex-officio*)

**Dean of Faculty** L. Kostiuk, Dean, Faculty of Engineering (*Ex-officio*)

**Dean, Faculty of Graduate & Postdoctoral Affairs** P. Smith, Dean, Faculty of Graduate Studies and Research (*Ex-officio*)

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Jason Etele Associate Chair, Graduate  
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