

DUNLAP INSTITUTE  
for ASTRONOMY & ASTROPHYSICS

# 2017 DUNLAP INSTITUTE SUMMER SCHOOL



23 – 28 JULY 2017

## Introduction to Astronomical Instrumentation

- LEARN BASIC PRINCIPLES OF RADIO, INFRARED, OPTICAL AND X-RAY INSTRUMENTATION
- LEARN HOW DETECTORS AND SPECTROGRAPHS WORK
- LEARN IN LECTURE AND HANDS-ON LABORATORY SESSIONS
- LEARN ABOUT A CAREER IN INSTRUMENTATION
- WORK WITH STUDENTS FROM AROUND THE WORLD
- LEARN FROM INTERNATIONAL LEADERS IN THE FIELD OF ASTRONOMICAL INSTRUMENTATION
- ATTEND A PROFESSIONAL DEVELOPMENT/MENTORING SESSION

For students who have finished at least the 3rd year of an undergraduate program or are in the early years of a graduate program, and have a background in astronomy, physics or engineering.

**Registration Fee: \$500**

*Travel subsidies and registration fee waivers available*

**Application and Travel Subsidy Deadline:  
31 March 2017**

Instructors include leading instrumentation and observational astronomers from the Dunlap Institute, U of T's Department of Astronomy & Astrophysics, and from Canadian, U.S. and international institutions.

*Visit our website for a list of instructors as they are confirmed.*

**DUNLAP.UTORONTO.CA/SUMMER-SCHOOL**

University of Toronto  
Toronto, Ontario, Canada



 Dunlap Institute for  
Astronomy & Astrophysics  
**UNIVERSITY OF TORONTO**

Image credit: X-ray: NASA/CXC/Wesleyan Univ./R. Kilgard; UV: NASA/JPL-Caltech; Optical: NASA/ESA/S. Beckwith & The Hubble Heritage Team (STScI/AURA); IR: NASA/JPL-Caltech/Univ. of Az./R. Kennicutt