## Some Astronomy Teaching Resources in Ontario

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My outreach webpage: http://www.astro.utoronto.ca/~percy/EPOindex.htm

My grade nine workshop notes:

 $http://www.astro.utoronto.ca/{\sim}percy/grade9workshop.htm$ 

Astronomical Society of the Pacific. The best source of astronomy education materials, on-line catalogue, on-line quarterly teachers' newsletter (TNL), on-line astronomy activities.

http://www.astrosociety.org/publications/universe-in-the-classroom/ (TNL)

http://www.astrosociety.org/education/educational-resources/ (Activities)

**Astronomy Clubs**. There are (in addition to the RASC Centres mentioned below) astronomy clubs in many cities and towns in Ontario, and across Canada. Many of them have outreach activities. See:

http://www.skynews.ca/resources/astronomy-clubs/

**Astronomy Education Review:** This important free on-line journal is now (as of 2013) "dormant" but the archived material is very useful:

http://scitation.aip.org/content/aas/journal/aer

**Books on Astronomy**. Any written by Terence Dickinson, published by Firefly Books, especially Exploring the Night Sky and Extraterrestrials for young people, and NightWatch and The Universe and Beyond and Summer Stargazing for anyone. Also Dan Falk's Universe on a T-Shirt and In Search of Time.

Canada Science and Technology Museum. Wide variety of programs for students, teachers, and the public, including planetarium programs, and sky viewing.

http://www.sciencetech.technomuses.ca

Canadian Astronomical Society, the organization of professional astronomers in Canada, has an education website which is now "dormant" but still contains some very important material, especially about Canadian astronomy and astronomers:

http://www.cascaeducation.ca

Canadian Space Agency has information and a web site on Space, including material for students and teachers.

http://www.asc-csa.gc.ca/eng/educators/default.asp

Cosmic Connections: Gives presentations and star parties for school classes and other youth groups. A fee is charged. (416) 728-0062. info@cosmicconnections.ca

http://www.cosmicconnections.ca

**David Dunlap Observatory**, Richmond Hill. Now operated voluntarily by the Toronto Centre of the Royal Astronomical Society of Canada; public programs in summer; some school programs.

 ${\rm http://www.theddo.ca}$ 

**Dunlap Institute of Astronomy and Astrophysics**, University of Toronto, has a strong mandate for outreach, including speakers and planetarium programs.

http://universe.utoronto.ca

Laurentian University, Doran Planetarium, Sudbury. Shows in English and French.

http://www.laurentian.ca/planetarium

Let's Talk Science. Award-winning national science outreach program has some astronomy activities for school classes and youth groups.

http://www.letstalkscience.ca

**McMaster University**, W.J. McCallion Planetarium, Department of Physics and Astronomy. Planetarium programs.

http://www.physics.mcmaster.ca/planetarium/

Ontario Science Centre. Wide variety of curriculum-based programs and exhibits for students, teachers, and the public, including planetarium programs and *OmniMax* films.

http://www.ontariosciencecentre.ca

Perimeter Institute for Theoretical Physics has a strong program of outreach to students, teachers, and the general public:

http://www.perimeterinstitute.ca/outreach

Royal Astronomical Society of Canada has Ontario branches or Centres in: Belleville, Ottawa, Kingston, Niagara, Toronto, Hamilton, Kitchener-Waterloo, London, Mississauga, Sarnia, Windsor, and Thunder Bay. Many have programs for schools and the public.

http://www.rasc.ca/x where x is the name of the Centre

Royal Ontario Museum, Education Department, Toronto. Wide variety of curriculum-related programs for students and teachers, using mobile planetariums. Also has an excellent meteorite collection.

http://www.rom.on.ca/en/education/school-visits E.g. search on StarLab

Science North, Sudbury. School programs; 3D films, planetarium.

http://www.sciencenorth.ca

**SkyNews**, Box 10, Yarker ON K0K 3N0. Astronomy from a Canadian perspective; edited by Terence Dickinson; the best magazine resource on astronomy for school libraries!

http://www.skynews.com

**Solar Wind**, Toronto ON, offers curriculum-based workshops and presentations. A fee is charged. 416-221-7375; solar.wind@pathcom.com

The Sun on Line: There are several sites where you can access daily images of the sun, to study its varying appearance; one is:

http://umbra.nascom.nasa.gov/images/

University of Toronto, Department of Astronomy. Public open house on the first Thursday evening of each month. Occasional public lectures at other times. New initiatives to support teachers (TBA).

http://uoft.me/astrotours

Western University, Hume Cronyn Observatory, Department of Physics and Astronomy, London. Summer open houses, with sky viewing; winter programs by appointment. Other activities. The Centre for Planetary Sciences also has extensive outreach activities.

http://physics.uwo.ca/community/index.html (Physics/Astronomy)

http://cpsx.uwo.ca/outreach (Centre for Planetary Sciences)

York University, Department of Physics and Astronomy, Downsview. Tours all year, day or evening, by appointment. Public tours on Wednesday evenings. (416) 736-2100x77773.

http://astronomy.blog.yorku.ca