

Eric W. Koch

Curriculum Vitæ

Dept. of Physics, University of Alberta
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Education

- 2014-2016 *University of Alberta*
MSc. (Physics)
Thesis: “Triggered Star Formation in M33”
Adviser: Erik Rosolowsky
- 2010-2014 *University of British Columbia*
Hon. BSc. (Physics)

Employment

- 2014–present *University of Alberta*
Graduate Student
- 2011-2013 *University of British Columbia, Okanagan*
Teaching Assistant
- 2013-2014 *University of British Columbia, Okanagan*
Research Assistant

Fellowships and Awards

- 2015 *University of Alberta*
Queen Elizabeth II MSc Scholarship - \$10,800 CAD
- 2010-2014 *University of British Columbia, Okanagan*
Deputy Vice Chancellor Scholarship - \$1,500 CAD each year
- 2014 *University of British Columbia, Okanagan*
Distinguished Graduate Award - Physics, Math, Statistics & Computer Science
- 2014 *University of Alberta*
NSERC CGSM - \$17,500 CAD
- 2013 *University of Alberta*
NSERC USRA
- 2013 *University of British Columbia, Okanagan*
Top Oral Presenter - UBC-O Undergraduate Research Conference
- 2013 *University of British Columbia, Okanagan*
Upper Year Physics Award
- 2012 *University of British Columbia, Okanagan*
NSERC USRA
- 2012 *University of British Columbia, Okanagan*
Second Year Physics Award - Honourable Mention
- 2010 *University of British Columbia, Okanagan*
President’s Entrance Scholarship - \$2,500 CAD

External Funding

- 2015 **Co-I** - *A centralized database for pan-chromatic nearby galaxy data*
Amazon Web Services & Square Kilometre Array
\$3200 USD (credits)
- 2015 **Co-I** - *Development of an image variability service in the cloud*
Amazon Web Services & Square Kilometre Array
\$14000 USD (credits)

2015 **PI** - *Developing a radio cube imaging service in the cloud*
Amazon Web Services & Square Kilometre Array
\$1500 USD (credits)

Submitted Publications

1. **EW Koch**, CG Ward, S Offner, J Loeppky, E Rosolowsky. “*Tools for Critically Evaluating Simulations of Star Formation.*” 2016, MNRAS submitted.

Refereed Publications

2. **EW Koch**, EW Rosolowsky. “*Filament Identification through Mathematical Morphology.*” 2015, [MNRAS 452 3435-3450](#).
1. **EW Koch**, A Bahramian, CO Heinke, K Mori, N Rea, N Degenaar, D Haggard, R Wijnands, G Ponti, JM Miller, F Yusef-Zadeh, F Dufour, WD Cotton, FK Baganoff, MT Reynolds. “*The 2013 outburst of a transient very faint X-ray binary, 23 arcsec from Sgr A*.*” 2014, [MNRAS 442 372-381](#).

Professional Talks

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| 2016 Feb | <i>MPE - CAS Seminar</i>
“Comparing Simulations and Observations of Star Formation using Experimental Design” |
| 2016 Feb | <i>MPIfR - Special Colloquium</i>
“Comparing Simulations and Observations of Star Formation using Experimental Design” |
| 2015 May | <i>Florence Simulations-Observations Workshop (Florence, Italy)</i>
“Critically Comparing Simulations and Observations of Star Formation” |
| 2014 Apr | <i>UBC-O Undergraduate Research Conference (Kelowna)</i>
“Filament Identification through Mathematical Morphology” |
| 2013 Nov | <i>UBC-O Brown Bag Series (Kelowna)</i>
“A New Low-Mass X-Ray Binary in the Galactic Centre” |
| 2013 Apr | <i>UBC-O Undergraduate Research Conference (Kelowna)</i>
“Converging Flows in Star-Forming Regions” |

Poster Presentations

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| 2013 Jun | <i>Canadian Astronomical Society Conference (Vancouver)</i>
“UBC-O Undergraduate Research Conference” |
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