

# Eric W. Koch

## Curriculum Vitæ

Dept. of Physics, University of Alberta  
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[e-koch.github.io](https://e-koch.github.io)

Updated Dec 31, 2015.

### Education

- 2016 *University of Alberta*  
MSc. (Physics)  
Thesis: “Triggered Star Formation in M33”  
Adviser: Erik Rosolowsky
- 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 for Dr. Jason Loepky

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

## Poster Presentations

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