

Eric W. Koch

Curriculum Vitæ

Dept. of Physics, University of Alberta
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Education

- 2016-Present *University of Alberta*
PhD. (Physics)
Adviser: Erik Rosolowsky
- 2014-2016 *University of Alberta*
MSc. (Physics)
Thesis: "The Atomic Interstellar Medium 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

- 2016 *University of Alberta*
NSERC Post-graduate Graduate Scholarship - Doctorate
- 2015 *University of Alberta*
Queen Elizabeth II MSc Scholarship
- 2010-2014 *University of British Columbia, Okanagan*
Deputy Vice Chancellor Scholarship
- 2014 *University of British Columbia, Okanagan*
Distinguished Graduate Award - Physics, Math, Statistics & Computer Science
- 2014 *University of Alberta*
NSERC Canadian Graduate Scholarship - Masters
- 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

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. “*Identifying Tools for Comparing Simulations of Star Formation.*” 2016, MNRAS submitted.

Refereed Publications

4. RD Boyden, **EW Koch**, EW Rosolowsky, SSR Offner. “*An Exploration of the Statistical Signatures of Stellar Feedback.*” 2016, [arxiv:1611.00781](#).
3. Y Lin, HB Liu, D Li, Z-Y Zhang, A Ginsburg, JE Pineda, L Qian, R Galván-Madrid, AF McLeod, E Rosolowsky, JE Dale, K Immer, **E Koch**, S Longmore, D Walker, L Testi. “*Cloud Structure of Galactic OB Cluster-forming Regions from Combining Ground and Space-based Bolometric Observations.*” 2016, [ApJ 828 32](#).
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

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

Poster Presentations

- 2013 Jun *Canadian Astronomical Society Conference (Vancouver)*
“UBC-O Undergraduate Research Conference”