

Karin Dissauer

CURRICULUM VITÆ

NorthWest Research Associates
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Education and training

- Current position** since 11/2019 **post doc** at NorthWest Research Associates (NWRA), Boulder, Colorado, USA
- 10/2018 - 09/2019 **Post doc** at the Institute of Physics of the University of Graz, Austria
- 12/2014 - 10/2018 **PhD in Physics (Focus: Astrophysics)** at the University of Graz, with Honors
Thesis: *Diagnostics of coronal dimmings associated with solar coronal mass ejections*
Supervisor: Assoc. Univ.-Prof. Dr. Astrid Veronig
- 04/2011 - 03/2013 **MSc. in Physics (Focus: Theoretical Physics)** at the University of Graz, with Honors
Thesis: *The Darker Shade of the Standard Model*, external at CP³-Origins, Odense, Denmark
Supervisor: Francesco Sannino, PhD, PhD
- 10/2007 - 04/2011 **BSc. in Physics** at the University of Graz, with Honors
- Teaching** Institute of Physics, University of Graz
2017 – present Co-supervision of Master students
Teaching Assistant (*Tutorial Theoretical Mechanics*) WS 10/11 & WS 11/12

Research interests

- Solar coronal mass ejections (CMEs): initiation and early acceleration/propagation phase, relationship with associated phenomena such as coronal dimmings and large-scale waves
- Solar flares: pre-heating in the corona

Publications

13 peer-reviewed scientific papers in international journals (4 as a first author) with a total number of 62 citations (42 without self-citation, according to NASA-ADS).

- (13) M. Dumbović, J. Guo, M. Temmer, M.L. Mays, A.M. Veronig, S. Heinemann, **K. Dissauer**, S. Hofmeister, J. Halekas, C. Möstl, T. Amerstorfer, J. Hinterreiter, S. Banjac, K. Herbst, Y. Wang, L. Holznecht, M. Leitner, R.F. Wimmer-Schweingruber, Unusual plasma and particle signatures at Mars and STEREO-A related to CME-CME interaction, *ApJ* in press (2019)
- (12) A.M. Veronig, P. Gömöry, **K. Dissauer**, M. Temmer, K. Vanninathan, Spectroscopy and Differential Emission Measure Diagnostics of a Coronal Dimming associated with a Fast Halo CME, *ApJ* in press (2019)
- (11) T. Podladchikova, A.M. Veronig, **K. Dissauer**, M. Temmer, O. Podladchikova, Three Dimensional Reconstructions of EUV Wave Front Heights and their Influence on Wave Kinematics, *ApJ*, 877, 68, (2019)
- (10) **K. Dissauer**, A.M. Veronig, M. Temmer, T. Podladchikova, Statistics of coronal dimmings associated with coronal mass ejections. II. Relationship between coronal dimmings and their associated CMEs, *ApJ*, 874, 123 (2019)
- (9) A.M. Veronig, T. Podladchikova, **K. Dissauer**, M. Temmer, D.B. Seaton, D. Long, J. Guo, B. Vršnak, L. Harra, B. Kliem, Genesis and impulsive evolution of the 2017 September 10 coronal mass ejection, *ApJ*, 868, 107, (2018)
- (8) **K. Dissauer**, A.M. Veronig, M. Temmer, T. Podladchikova, K. Vanninathan, Statistics of coronal dimmings associated with coronal mass ejections. I. Characteristic dimming properties and flare association, *ApJ*, 863, 169, (2018)
- (7) L. Liu, Y. Wang, Z. Zhou, **K. Dissauer**, M. Temmer, J. Cui, A Comparative Study between a Failed and a Successful Eruption Initiated from the Same Polarity Inversion Line in AR 11387, *ApJ*, 858, 121, (2018)
- (6) K. Vanninathan, A.M. Veronig, **K. Dissauer**, M. Temmer, Plasma diagnostics of coronal dimming events,

ApJ, 857, 62, (2018)

(5) **K. Dissauer**, A.M. Veronig, M. Temmer, T. Podladchikova, K. Vanninathan, On the detection of coronal dimmings and the extraction of their characteristic properties, ApJ, 855, 137, (2018)

(4) M. Temmer, J.K. Thalmann, **K. Dissauer**, A.M. Veronig, J. Tschernitz, J. Hinterreiter, L. Rodriguez, On Flare-CME Characteristics from Sun to Earth Combining Remote-Sensing Image Data with In Situ Measurements Supported by Modeling, Solar Physics, 292, 93 (2017)

(3) **K. Dissauer**, M. Temmer, A.M. Veronig, K. Vanninathan, J. Magdalenic, Projection effects in coronal dimming and associated EUV wave event, ApJ, 830, 92, (2016)

(2) K. Vanninathan, A.M. Veronig, **K. Dissauer**, M. Madjarska, I. Hannah, E. Kontar, Coronal Response to an EUV Wave from DEM Analysis, ApJ 812, 173, (2015)

(1) **K. Dissauer**, M.T. Frandsen, T. Hapola, F. Sannino, Perturbative extension of the standard model with a 125 GeV Higgs and Magnetic Dark Matter, Phys. Rev. D87 035005, (2013)

Experience abroad

more than 30 abstracts at international conferences and workshops (ESPM, EGU, ESWW, ISSI, COSPAR, etc.), including **1 invited talk** ("Studying the dynamics of coronal dimmings and their relationship to flares and coronal mass ejections", 2018 SDO Science Workshop), **6 oral presentations** and **7 posters as presenting author**

ERASMUS student 2010 (five months), Syddansk Universitet, CP³-Origins, Odense, Denmark

Research stays Royal Observatory of Belgium, Brussels, Belgium, 2015, (one month); Astronomical Institute of the Slovak Academy of Sciences, Tatranská Lomnica, Slovakia, 2016, 2017 (one week each); Udaipur Solar Observatory, Udaipur, India, 2018 (ten days)

Summer Schools "1st SORLARNET Spring School", Wroclaw, Poland, 2014; "CESRA Radio Summer School", Glasgow, UK, 2015; "RadioSun Summer School", České Budějovice, Czech Republic, 2016; "HESPERIA Summer School", Kiel, Germany, 2016

Achievements

Awards & Grants *Young Women Scientist Award 2019*

Faculty of Natural Sciences, University of Graz

Thomas Metcalf Travel Award 2018

Solar Physics Division of the American Astronomical Society

Academic Excellence Scholarship 2008/09, 2007/08 & 2017/18

University of Graz

Memberships SPD (Solar Physics Division)

EGU (European Geosciences Union)

Projects and funding

Employment at the University of Graz from 10/2013 until 09/2019 under the following projects:

- "Solar and stellar CMEs: characterization by coronal dimmings" (SSCME, ASAP-14 865972)
- "Diagnostics of coronal dimmings associated with solar coronal mass ejections" (CORDIM, ASAP-11 4900217)
- "Large-scale EUV waves: Dynamics, driver and plasma properties" (FWF P24092-N16)
- participated in writing proposals for projects: CORDIM and SSCME

Scientific community service

- Part of the SCOSTEP/VarSITI MiniMax24 campaign providing daily updates on solar and geospace events

- Member of the *Local Organizing Committee* of the 15th RHESSI Workshop, Graz, 2016

- Member of the *Local Organizing Committee* of the Chinese European Solar Physics Meeting (CESPM), Hvar, 2019

Public Outreach Demonstrator at various public outreach events (e.g. *Lange Nacht der Forschung*, *Weltraumtag*, partial solar eclipse, mercury transit, etc.) in Graz since 2014.