

Curriculum Vitae

Gábor Worseck
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Current Position: Postdoctoral Research Scholar at UCO/Lick Observatory,
University of California, Santa Cruz, USA

Research Interests: Intergalactic Medium, Cosmic UV Background,
Reionization of Hydrogen and Helium, Quasar Surveys

Education: May 2008: Ph.D. in Astrophysics, Potsdam University (Germany) in
collaboration with the Astrophysical Institute Potsdam (AIP),
Ph.D. Thesis “*The Transverse Proximity Effect in Quasar Spectra*” super-
vised by Prof. Dr. Lutz Wisotzki (AIP), grade: *magna cum laude*

Jan 2004: Physics Diploma, Potsdam University

Jun 2008: participation in the 58th Meeting of Nobel Laureates,
Lindau, Germany

Apr 2006: participation in the 36th Saas-Fee Course “*First Light in the
Universe*”, Les Diablerets, Switzerland

Work Experience: Oct 2008–Present: Postdoctoral Research Scholar at UCO/Lick Observa-
tory (Supervisor: Prof. Dr. J. Xavier Prochaska)

Jan 2008–Sep 2008: Research Assistant at AIP
(Supervisor: Prof. Dr. Lutz Wisotzki)

Apr 2004–Dec 2007: Ph.D. Student at AIP
(Advisor: Prof. Dr. Lutz Wisotzki)

Publications: Worseck, G., Prochaska, J. X., McQuinn, M., Dall’Aglío, A., Fechner, C.,
Hennawi, J. F., Reimers, D., Richter, P., Wisotzki, L., “*The end of helium
reionization at $z \sim 2.7$ inferred from cosmic variance in HST/COS He II
Ly α absorption spectra*”, 2011, ApJ, 733, L24

Worseck, G. & Prochaska, J. X., “*GALEX far-ultraviolet color selection of
UV-bright high-redshift quasars*”, 2011, ApJ, 728, 23

Prochaska, J. X., O’Meara, J. M. & Worseck, G., “*A definitive survey for
Lyman limit systems at $z \sim 3.5$ with the Sloan Digital Sky Survey*”, 2010,
ApJ, 718, 392

Prochaska, J. X., Worseck, G. & O’Meara, J. M., “*A direct measurement
of the intergalactic medium opacity to HI ionizing photons*”, 2009, ApJ,
705, L113

Dall’Aglío, A., Wisotzki, L. & Worseck, G., “*An unbiased measurement
of the UV background and its evolution via the proximity effect in quasar
spectra*”, 2008, A&A, 491, 465

Worseck, G., Wisotzki, L. & Selman, F., “*A slitless spectroscopic survey
for quasars near quasars*”, 2008, A&A, 487, 539

- Publications (cont'd):** Dall'Aglio, A., Wisotzki, L. & Worseck, G., "*The line-of-sight proximity effect in individual quasar spectra*", 2008, A&A, 480, 359
Worseck, G., Fechner, C., Wisotzki, L. & Dall'Aglio, A., "*The transverse proximity effect in spectral hardness towards HE 2347-4342*", 2007, A&A, 473, 805
Worseck, G. & Wisotzki, L., "*Quasars near the line of sight towards Q 0302-003 and the transverse proximity effect*", 2006, A&A, 450, 495
- Conference Talks:** "*Probing He II reionization with GALEX-selected quasar sightlines in the HST/COS era*", Cosmological Reionization, Harish-Chandra Research Institute, Allahabad, India, February 2010
"*Probing He II reionization with GALEX-selected quasar sightlines*", Reionization @ Ringberg, Ringberg Castle, Germany, March 2009
"*The transverse proximity effect in spectral hardness*", Science with the new Hubble Space Telescope after Servicing Mission 4, Bologna, Italy, January 2008
"*The transverse proximity effect in spectral hardness*", Cosmic Frontiers, Durham, UK, July 2006
- Conference Posters:** "*Probing He II reionization with GALEX-selected quasar sightlines*", 25th IAP Colloquium, Paris, France, July 2009
"*The transverse proximity effect in spectral hardness*", 24th IAP Colloquium, Paris, France, July 2008
"*The hardening of the UV background near quasars*", HI Survival through Cosmic Times, Spineto, Italy, June 2007
- Invited Colloquia:** 11/03/2010: "*Probing the helium reionization epoch with the He II Lyman alpha forest in the HST/COS era*", UC San Diego, USA
06/19/2009: "*Constraining helium reionization with the He II Lyman alpha forest in the HST/COS era*", Lawrence Berkeley National Lab, USA
07/16/2008: "*The transverse proximity effect in quasar spectra*", Durham University, UK
- PI Observing Programs:** "*Surveying the post-reionization universe with quasar spectroscopy I-III*", Gemini Observatory, 162 hours over Semesters 2010A, 2010B, 2011A
"*A dedicated quasar survey to identify the sources of He II reionization*", Kitt Peak National Observatory, 2011A-0449, 4 nights
"*New quasars for He II IGM studies from SDSS+GALEX photometry*", Lick Observatory, 2011A-S005, 3 nights
"*The second cosmic reionization: Measuring the fluctuating spectral softness of the metagalactic UV background*", ESO Very Large Telescope, 083.A-0421, 38.2 hours
"*Probing He II reionization with GALEX-selected quasar sightlines and HST/COS*", Hubble Space Telescope, GO-11742, 21 orbits

- Observing Experience:** Feb 2011: 3 nights at Lick Observatory, longslit spectroscopy with KAST
Feb 2010: 1 night at W. M. Keck Observatory, echelle spectroscopy with HIRES
Mar 2009: 2 nights at W. M. Keck Observatory, echelle spectroscopy with HIRES
Oct 2008: 5 nights at W. M. Keck Observatory, spectroscopy with HIRES and LRIS
Nov 2004: 3 nights at ESO/VLT, longslit spectroscopy with FORS2
Mar 2003: 10 nights at Calar Alto 2.2 m, imaging and longslit spectroscopy
Oct 2002: 5 nights at ESO/MPI 2.2 m, slitless spectroscopy with WFI
- Teaching Experience:** lab exercises in astrophysics for 2nd–3rd year students (2 semesters)
tutorials for 1st year students (3 semesters, 2002–2003)
- Other Activities:** co-organizer of group meetings at UCSC, member of LOC at two international conferences