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Education

- Ph.D., Astrophysics, The Queen's University of Belfast, N. Ireland Sep. 2000
- M.Sc., Astrophysics, Université Louis Pasteur, Strasbourg, France June 1995
- B.Sc., Physics, Université Louis Pasteur, Strasbourg, France June 1994

Positions

- **Research Assistant Professor** Aug. 06 – Present
University of Notre Dame, Notre Dame, IN, USA
- **Research Scientist** Oct. 05 – Aug. 06
University of Notre Dame, Notre Dame, IN, USA
- **Research Scientist** Dec. 02 – Sep. 05
University of Wisconsin, Madison, WI, USA
- **Research Scientist** Oct. 00 – Nov. 02
The Johns Hopkins University, Baltimore, MD, USA

Research Interests

- Observational cosmology
- Galaxy formation and evolution
- Physics of the interstellar and intergalactic medium

Scholarships and Fellowships

- European Social Fund postgraduate studentships Sep. 97 – Sep. 00
- Northern Ireland Development for Research postgraduate studentships Sep. 97 – Sep. 00

Professional Memberships

- American Astronomical Society
- Far Ultraviolet Spectroscopic Explorer associate PI team member

Professional Services

- Astronomy & Museum Educator Nov. 95 – Jul. 97
Planétarium de Strasbourg, Strasbourg, France
Main duties: Developed and presented educational and entertaining programming in astronomy and the other sciences to pupil schools; students, and general public.
- Open University Assistant Teacher, Strasbourg-Mulhouse, France May 96
Course taught: The Universe observed in different wavelengths
- Scientific referee for the Astrophysical Journal 02 – Present
- Mentoring/supervising graduate students Oct. 05 – Present

Refereed Publications

1. “Probing feedback in protogalaxies: multiphase gas in a DLA at $z \sim 2.4$,” N. Lehner, J.C. Howk, J.X. Prochaska, and A.M. Wolfe, *Monthly Notices of the Royal Astronomical Society* 390, 2-20 (2008).
2. “A High-Resolution Survey of Low-Redshift QSO Absorption Lines: Statistics and Physical Conditions of O ν I Absorbers,” T.M. Tripp, K.R. Sembach, D.V. Bowen, B.D. Savage, E.B. Jenkins, **N. Lehner**, P. Richter, *Astrophysical Journal Supplement Series*, 177, 39-102 (2008).
3. “The High-Velocity Gas toward Messier 5: Tracing Feedback Flows in the Inner Galaxy,” W.F. Zech, **N. Lehner**, J.C. Howk, W.V.D. Dixon, and T.M. Brown, *Astrophysical Journal* 679, 460-480 (2008).
4. “Metallicity and Physical Conditions in the Magellanic Bridge,” **N. Lehner**, J.C. Howk, F.P. Keenan, J.V. Smoker, *Astrophysical Journal* 678, 219-233 (2008).
5. “Highly Ionized Plasma in the Large Magellanic Cloud: Evidence for Outflows and a Possible Galactic Wind,” **N. Lehner**, J.C. Howk, J.C., *Monthly Notices Royal Astronomy Society*, in press (2007).
6. “The Abundance of Deuterium in the Warm Neutral Medium of the Lower Galactic Halo,” B.D. Savage, **N. Lehner**, A. Fox, B.P. Wakker, K.R. Sembach, T.M. Tripp, *The Astrophysical Journal*, in press (2007).
7. “Physical Properties, Baryon Content, and Evolution of the Ly α Forest: New Insights from High Resolution Observations at $z \leq 0.4$,” **N. Lehner**, B.D. Savage, B.P. Wakker, K.R. Sembach, T.M. Tripp, *The Astrophysical Journal*, in press (2007).
8. “What is the Total Deuterium Abundance in the Local Galactic Disk?” J.L. Linsky, (14 co-authors including **N. Lehner**), *The Astrophysical Journal* 647, 1106 (2006).
9. “Low Redshift Intergalactic Absorption Lines in the Spectrum of HE0226–4110,” **N. Lehner**, B.D. Savage, B.P. Wakker, K.R. Sembach, T.M. Tripp, *The Astrophysical Journal Supplement Series* 164, 1 (2006).
10. “Properties of the Ovi Absorption in the Local Interstellar Medium,” B.D. Savage, **N. Lehner**, *The Astrophysical Journal Supplement Series* 162, 134 (2006).
11. “Ca II K Observations of QSOs in the line-of-sight to the Magellanic Bridge,” J.V. Smoker, F.P. Keenan, H.M.A. Thompson, C. Bruens, E. Muller, **N. Lehner**, C. Kobulnicky, J.-K. Lee, I. Hunter, *Astronomy and Astrophysics* 443, 525 (2005).
12. “Detection of Ne VIII in the Low-Redshift Warm-Hot IGM,” B.D. Savage, **N. Lehner**, B.P. Wakker, K.R. Sembach, T.M. Tripp, *The Astrophysical Journal* 626, 776 (2005).

13. "Small-Scale Structure of O VI Interstellar Gas in the Direction of the Globular Cluster NGC 6752," **N. Lehner**, J.C. Howk, The Publications of the Astronomical Society of the Pacific 116, 895 (2004).
14. "C II Radiative Cooling of the Diffuse Gas in the Milky Way," **N. Lehner**, B.P. Wakker, B.D. Savage, The Astrophysical Journal 615, 767 (2004).
15. "FUSE Survey of the Local Interstellar Medium within 200 Parsec," **N. Lehner**, E.B. Jenkins, C. Gry, H.W. Moos, P. Chayer, S. Lacour, The Astrophysical Journal 595, 858 (2003).
16. "A Search for O VI in the Winds of B-Type Stars," J. Zsargó, A.W. Fullerton, **N. Lehner**, D. Massa, Astronomy and Astrophysics 405, 1043 (2003).
17. "FUSE Snapshot Survey of O VI Variability in the Winds of 66 OB-Type Stars," N. Lehner, A.W. Fullerton, D. Massa, K.R. Sembach, J. Zsargó, The Astrophysical Journal 589, 526 (2003).
18. "FUSE Observations of the Magellanic Bridge Gas toward Two Early-Type Stars: Molecules, Physical Conditions, and Relative Abundances," **N. Lehner**, The Astrophysical Journal 578, 126 (2002).
19. "The Deuterium-to-Oxygen Ratio in the Local Interstellar Medium from FUSE observations," G. Hébrard, S.D. Friedman, J.W. Kruk, **N. Lehner**, et al., Planetary and Space Science 50, 1169 (2002).
20. "Optical Spectroscopy of the M 15 Intermediate Velocity Cloud," J.V. Smoker, F.P. Keenan, **N. Lehner**, C. Trundle, Astronomy and Astrophysics 387, 1057 (2002).
21. "Abundances of Deuterium, Nitrogen, and Oxygen in the Local Interstellar Medium: Overview of First Results from the FUSE Mission," H.W. Moos, K.R. Sembach, A. Vidal-Madjar, D.G. York, S.D. Friedman, G. Hébrard, J.W. Kruk, **N. Lehner**, M. Lemoine, G. Sonneborn, B.E. Wood, et al., The Astrophysical Journal Supplement Series 140, 3 (2002).
22. "Deuterium Abundance toward WD0621-376: Results from the FUSE Mission," **N. Lehner**, C. Gry, K.R. Sembach, G. Hébrard, P. Chayer, H.W. Moos, J.C. Howk, J.M. Désert, The Astrophysical Journal Supplement Series 140, 81 (2002).
23. "A Peculiar Metal Rich Star, HD135485," C. Trundle, P.L. Dufton, W.R.J. Rolleston, R.S.I. Ryans, D.J. Lennon, **N. Lehner**, Monthly Notices Royal Astronomy Society 328, 291 (2001).
24. "The Influence of Stellar Wind Variability on Measurements of Interstellar O VI along Sightlines to Early-Type Stars," **N. Lehner**, A.W. Fullerton, K.R. Sembach, D. Massa, E.B. Jenkins, The Astrophysical Journal Letter 556, L103 (2001).

25. “HST/STIS Observations of the High-Velocity Interstellar Cloud HVC 291.2-41.2+80: A Warm, Mainly Ionized High-Velocity Cloud,” **N. Lehner**, F.P. Keenan, K.R. Sembach, Monthly Notices Royal Astronomy Society 323, 904 (2001).
26. “Line Identification in the Ca II K Spectral Region of Sharp-Lined B-Type Stars,” **N. Lehner**, C. Trundle, F.P. Keenan, K.R. Sembach, D.L. Lambert, Astronomy and Astrophysics 370, 996 (2001).
27. “Observations of the Interstellar Medium in the Magellanic Bridge,” **N. Lehner**, K.R. Sembach, P.L. Dufton, W.R.J. Rolleston, F.P. Keenan, The Astrophysical Journal 551, 781 (2001).
28. “H I and Optical Spectroscopy toward the M 15 Intermediate-Velocity Cloud,” J.V. Smoker, **N. Lehner**, F.P. Keenan, E.J. Totten, E. Murphy, K.R. Sembach, B. Bates, Monthly Notices Royal Astronomy Society 322, 13 (2001).
29. “CO and Optical Observations of the Magellanic Bridge,” J.V. Smoker, F.P. Keenan, A. Polatidis, C.J. Mooney, **N. Lehner**, W.R.J. Rolleston, Astronomy and Astrophysics 363, 451 (2000).
30. “High-Resolution Optical Spectroscopy of the Sharp-Lined B-type star HD83206,” **N. Lehner**, P.L. Dufton, D.L. Lambert, R.S.I. Ryans, F.P. Keenan, Monthly Notices Royal Astronomy Society 314, 199 (2000).
31. “Optical Observations of Three Galactic Halo Stars: Evidence for Cloudlets in Intermediate- and High-Velocity Interstellar Clouds,” **N. Lehner**, K.R. Sembach, D.L. Lambert, R.S.I. Ryans, F.P. Keenan, Astronomy and Astrophysics 352, 257 (1999).
32. “Low Resolution Optical Spectroscopy of the M 15 High-Velocity Interstellar Cloud,” J.V. Smoker, **N. Lehner**, F.P. Keenan, E.J. Totten, Irish Astronomical Journal 26, 105 (1999).
33. “High-velocity Interstellar Clouds toward the M15 Globular Cluster: I. Low Resolution Optical Data,” **N. Lehner**, W.R.J. Rolleston, R.S.I. Ryans, F.P. Keenan, B. Bates, D.L. Pollacco, K.R. Sembach, Astronomy and Astrophysics Supplement 134, 257 (1999).

Unrefereed Publications

1. “Spitzer Observations of Extraplanar Emission from Spiral Galaxies,” **N. Lehner**, J.C. Howk, Les 5èmes Rencontres de l’Observatoire de Paris, “Visions for Infrared Astronomy,” 2006, in press.
2. “Discovery of a Hot, Multiphase Ne VIII/O VI Absorber in the Low-Redshift IGM,” B.D. Savage, **N. Lehner**, B.P. Wakker, K.R. Sembach, T.M. Tripp, “Five Years of Discovery with FUSE,” Victoria, BC., ASPC 348, 363 (2006).
3. “C II Radiative Cooling of the Diffuse Gas in the Milky Way,” **N. Lehner**, B.P. Wakker, B.D. Savage, “Five Years of Discovery with FUSE,” ASPC 348, 448 (2006).

4. “Discovery of a Hot, Multiphase Ne VIII/O VI Absorber in the Low-Redshift IGM,” B.D. Savage, N. Lehner, B.P. Wakker, K.R. Sembach, T.M. Tripp, “Five Years of Discovery with FUSE,” Victoria, BC., ASPC 348, 363 (2006).
5. “Distribution and Baryon Content of H I Absorbers at $z < 0.5$,” **N. Lehner**, B.D. Savage, B.P. Wakker, K.R. Sembach, T.M. Tripp, IAU Colloq. 199: Probing Galaxies through Quasar Absorption Lines, 162 (2005).
6. “FUSE Survey of the Local Interstellar Medium,” **N. Lehner**, C. Gry, E.B. Jenkins, H.W. Moos, S. Lacour, ASSL Vol. 315: How Does the Galaxy Work?, 386 (2004).
7. “The Deuterium-to-Oxygen Ratio in the Local Interstellar Medium from FUSE Observations,” G. Hébrard, S.D. Friedman, J.W. Kruk, **N. Lehner**, M. Lemoine, J.L. Linsky, H.W. Moos, C. Oliveira, K.R. Sembach, G. Sonneborn, A. Vidal-Madjar, B.E. Wood, XVII IAP Colloquium, “Gaseous Matter in Galaxies and Intergalactic Space,” p. 79 (2001).
8. “FUSE Interstellar Studies of the WD0621–376 Sightline,” **N. Lehner**, C. Gry, K.R. Sembach, P. Chayer, H.W. Moos, G. Hébrard, R. Ferlet, XVII IAP Colloquium, “Gaseous Matter in Galaxies and Intergalactic Space,” p. 77 (2001).
9. “HST/STIS Observation of the Magellanic Bridge: First interstellar abundance in the Magellanic Bridge,” **N. Lehner**, F.P. Keenan, P.L. Dufton, K.R. Sembach, Spring Symposium “A Decade of HST Science,” p. 53 (2000).
10. “The interstellar medium in the Magellanic Bridge,” **N. Lehner**, F.P. Keenan, J.V. Smoker, P.L. Dufton, W.R.J. Rolleston, F.C. McKenna, K.R. Sembach, J.E. Tohline, G. White, S. Stanimirovic, International Astronomical Union Symposium 190, p. 501 (1998).

Other Publications

1. “Les Planétariums et Internet: un Exercice de Style?” **N. Lehner**, review Planétariums 2, 33 (1996).

Invited Lectures and Addresses

1. October 2005 – “Intergalactic Medium in the Low Redshift Universe,” Talk presented at the University of Notre Dame, IN, USA.
2. March 2005 – “Distribution and Baryon Content of Hi Absorbers at $z < 0.5$,” Selected talk presented at the IAUC 199, “Probing Galaxies through Quasar Absorption Lines,” Shanghai, China.
3. March 2004 – “C II Radiative Cooling of the Diffuse Gas,” Colloquium presented at UW-Madison, WI, USA.

4. February 2004 – “C II Radiative Cooling of the Diffuse Gas in the Low, Intermediate, and High Velocity Clouds,” Talk presented at UC San Diego, CA, USA.
5. April 2000 – “HST/STIS Observations toward the General Direction of the Magellanic Bridge,” Talk presented at The Johns Hopkins University, Baltimore (MD), USA.
6. March 2000 – “HST/STIS Observations of a High-Velocity Interstellar Cloud toward the Magellanic Bridge,” Talk presented at the Astronomical Science Group of Ireland meeting, Dublin, Ireland.
7. March 2000 – “Abundances in the Interstellar Medium of the Magellanic Bridge,” Talk presented at the Queen’s University of Belfast, Belfast, Northern Ireland.
8. December 1999 – “The Remarkable Spectrum of the B-type star HD83206,” Invited seminar presented in the Observatory of Strasbourg, France.