

Kevin France

Publications under Review:

- 3) C. Danforth, J. Stocke, **K. France**, M. Begelman "Far-UV Emission Properties of FR1 Radio Galaxies", *submitted to ApJ*
- 2) M. McJunkin, **K. France**, et al. "Empirically-Estimated Far-UV Extinction Curves for Classical T Tauri Stars", *submitted to ApJ*
- 1) J. Fontenla, J. Linsky, J. Witbrod, **K. France**, et al. "Semi-empirical Modeling of the M dwarf Host Star GJ 832", *submitted to ApJ*

Select Refereed Publications (1st, 2nd, or 3rd author):

- 54) **K. France**, B. Fleming, K. Hoadley "CHISL: The Combined High-resolution and Imaging Spectrograph for the LUVOIR Surveyor", 2016, **JATIS**, v2(4)
- 53) R. Loyd, **K. France**, A. Youngblood, et al. "The MUSCLES Treasury Survey III: X-ray to Infrared Spectra of 11 M and K Stars Hosting Planets", 2016, **ApJ**, in press
- 52) A. Youngblood, **K. France**, R. Loyd, et al. "The MUSCLES Treasury Survey II: Intrinsic Lyman Alpha and Extreme Ultraviolet Spectra of K and M Dwarfs with Exoplanets", 2016, **ApJ**, in press
- 51) **K. France**, K. Hoadley, B. Fleming et al. "The SLICE, CHESS, and SISTINE Ultraviolet Spectrographs: Rocket-Borne Instrumentation Supporting Future Astrophysics Missions", 2016, **JAI**, 540001
- 50) A. I. Gomez de Castro, R. Loyd, **K. France**, et al. "Protoplanetary Disk Shadowing by Gas Infalling onto the Young Star AK Sco", 2016, **ApJL**, v818
- 49) **K. France**, R. Loyd, A. Youngblood, et al. "The MUSCLES Treasury Survey I: Motivation and Overview", 2016, **ApJ**, v820
- 48) L. Fossati, **K. France**, et al. "Far-UV spectroscopy of the planet-hosting star WASP-13: high energy irradiance, distance, age, planetary mass loss rate, and circumstellar environment", 2015, **ApJ**, v815

- 47) K. Hoadley, **K. France**, Alexander, R., McJunkin, M., and Schneider, P. C. "The Evolution of Inner Disk Gas in Transition Disks", 2015, **ApJ**, v812
- 46) P. C. Schneider, **K. France**, et al. "X-ray to NIR Emission from AA Tau During the Dim State", 2015, **A&A**, v584
- 45) **K. France**, R. McCray, C. Fransson, J. Larsson, et al. "Mapping High-velocity Ha and Ly α Emission from Supernova 1987A", 2015, **ApJL**, v801
- 44) **K. France**, G. Herczeg, M. McJunkin, S. Penton, "CO/H $_2$ Abundance Ratio $\approx 10^{-4}$ in a Protoplanetary Disk", 2014, **ApJ**, v794
- 43) **K. France**, J. L. Linsky, R. O. P. Loyd, "The ultraviolet radiation environment in the habitable zones around low-mass exoplanet host stars", 2014, **Ap&SS**, v354
- 42) J. Kulow, **K. France**, J. Linsky, and R. O. P., Loyd "Ly α Transit Spectroscopy and the Neutral Hydrogen Tail of the Hot Neptune GJ 436b", 2014, **ApJ**, v784
- 41) **K. France**, E. Schindhelm, E. Bergin, et al. "High-resolution Ultraviolet Radiation Fields of Classical T Tauri Stars", 2014, **ApJ**, v784
- 40) R. Loyd & **K. France** "Fluctuations and Flares in the Ultraviolet Line Emission of Cool Stars: Implications for Exoplanet Transit Observations", 2014, **ApJS**, v211
- 39) M. McJunkin, **K. France**, et al. "Direct Measurement of Interstellar Extinction toward Young Stars Using Atomic Hydrogen Ly α Absorption", 2014, **ApJ**, v780
- 38) F. Tian, **K. France**, et al. "High Stellar FUV/NUV Ratio and Oxygen Contents in the Atmospheres of Potentially Habitable Planets", 2014, **E&PSL**, 385
- 37) J. Linsky, J. Fontenla, and **K. France** "The Intrinsic Extreme Ultraviolet Fluxes of F5 V to M5 V Stars", 2014, **ApJ**, v780
- 36) C. Froning, T. Maccarone, **K. France**, et al. "Multiwavelength Observations of Swift J1753.5-0127", 2014, **ApJ**, v780

- 35) V. Vitale & **K. France** "X-ray Detection of GJ 581 and Simultaneous UV Observations", 2013, **A&A**, v558
- 34) **K. France** et al. "H₂ Excitation Structure on the Sightlines to δ Scorpii and ζ Ophiuci: First Results from the Sub-orbital Local Interstellar Cloud Experiment", 2013, **ApJL**, v772
- 33) C. Danforth, K. Nalewajko, **K. France**, and B. Keeney "A Fast Flare and Direct Redshift Constraint in Far-ultraviolet Spectra of the Blazar S5 0716+714", 2013, **ApJ**, v764
- 32) M. McJunkin, **K. France**, et al. "Probing the Inner Regions of Protoplanetary Disks with CO Absorption Line Spectroscopy", 2013, **ApJ**, v766
- 31) **K. France**, C. Froning, J. Linsky, et al. "The Ultraviolet Radiation Environment around M dwarf Exoplanet Host Stars", 2013, **ApJ**, v763
- 30) J. Linsky, **K. France**, and T. Ayres, "Computing Intrinsic Ly α Fluxes of F5 V to M5 V Stars", 2013, **ApJ**, v766
- 29) **K. France**, E. Schindhelm, G. Herczeg et al. "A *Hubble Space Telescope* Survey of H₂ Emission in the Circumstellar Environments of Young Stars", 2012, **ApJ**, v756
- 28) E. B. Burgh, **K. France**, and T. P. Snow "COS Observations of NGC 2024: An Indirect View Into the Heart of the Flame", 2012, **ApJL**, v755
- 27) E. Schindhelm, **K. France**, G. Herczeg, et al. "Lyman α Dominance of the Classical T Tauri Radiation Field", 2012, **ApJL**, v756
- 26) **K. France**, J. Linsky, F. Tian, C. Froning, and A. Roberge "Time-resolved Ultraviolet Spectroscopy of the M-dwarf GJ 876 Exoplanetary System", 2012, **ApJL**, v750
- 25) **K. France**, E. B. Burgh, G. J. Herczeg, et al. "CO and H₂ Absorption in the AA Tauri Circumstellar Disk ", 2012, **ApJ**, v744
- 24) E. Schindhelm, **K. France**, E. B. Burgh, et al. "Characterizing CO Fourth Positive Emission in Young Circumstellar Disks", 2012, **ApJ**, v746
- 23) **K. France**, R. McCray, S. Penton, R. Kirshner, et al. "*HST*-COS observations of Hydrogen, Helium, Carbon and Nitrogen Emission from the SN 1987A Reverse Shock", 2011, **ApJ**, v743

- 22) **K. France**, E. Schindhelm, E. B. Burgh, G. J. Herczeg, et al. "The Far-UV Continuum in Protoplanetary Disk Systems II: CO Fourth Positive Emission and Absorption", 2011, **ApJ**, v733
- 21) H. Yang, J. L. Linsky, and **K. France** "HST/COS Spectra of DF Tau and V4046 Sgr: First Detection of H₂ Absorption Against the Ly α Emission Line", 2011, **ApJL**, v730
- 20) **K. France**, H. Yang, and J. L. Linsky "The Far-UV Continuum in Protoplanetary Disk Systems I: Electron-Impact H₂ and Chromospheric Accretion", 2011, **ApJ**, v728
- 19) T. Ayres & **K. France** "Warm Coronal Rain on Young Solar Analog EK Draconis?", 2010, **ApJL**, v723
- 18) **K. France**, N. Nell, J. C. Green, and C. Leitherer "Diffuse Far-UV Line Emission from the Luminous Compact Blue Galaxy KISSR242", 2010, **ApJL**, v722
- 17) B. Fleming, **K. France**, S. R. McCandliss, R. E. Lupu "Spitzer Mapping of PAH and H₂ Features in Photodissociation Regions", 2010, **ApJ**, v725
- 16) **K. France**, R. McCray, K. Heng, R. P. Kirshner et al. "Observing SN 1987A with the Refurbished *Hubble Space Telescope*", 2010, **Science**, v329
- 15) J. M. Shull, **K. France**, C. W. Danforth, B. Smith, and J. Tumlinson "Hubble/COS Observations of the Quasar HE2347-4342: Probing the Epoch of Hell Patchy Reionization at Redshifts $z = 2.4 - 2.9$ ", 2010, **ApJ**, v722
- 14) J. Linsky, H. Yang, **K. France**, et al. "Observations of Mass Loss from the Transiting Exoplanet HD209458b", 2010, **ApJ**, v717
- 13) **K. France**, J. Linsky, et al. "Metal Depletion and Warm H₂ in the Brown Dwarf 2M1207 Accretion Disk" 2010, **ApJ**, v715
- 12) **K. France**, J. T. Stocke, et al. "Searching for Far-Ultraviolet Auroral/Dayglow Emission from HD209458b" 2010, **ApJ**, v712
- 11) S. R. McCandliss, **K. France**, et al. "Far-UV Sensitivity of the Cosmic Origins Spectrograph" 2010, **ApJL**, v709

- 10) E. B. Burgh, **K. France**, and E. B. Jenkins "Atomic and Molecular Carbon as a Tracer of Translucent Clouds" 2010, **ApJ**, v708
- 9) **K. France**, M. Beasley, et al. "Cosmic Origins Spectrograph Observations of the Chemical Composition of LMC N132D " 2009, **ApJL**, v707
- 8) **K. France**, A. Roberge, R. E. Lupu, S. Redfield, P. D. Feldman "Detection of a Low-Mass H₂ Component to the AU Microscopii Circumstellar Disk" 2007, **ApJ**, v668
- 7) S. R. McCandliss, **K. France**, et al. "Molecular and Atomic Excitation Stratification in the Outflow of the Planetary Nebula M 27" 2007, **ApJ**, v659
- 6) E. B. Burgh, **K. France**, and S. R. McCandliss "Direct Measurement of the Ratio of Carbon Monoxide to Molecular Hydrogen in the Diffuse Interstellar Medium" 2007, **ApJ**, v658
- 5) **K. France**, S. R. McCandliss, and R. E. Lupu "A Cometary Bow Shock and Mid-Infrared Emission Variations Revealed in *Spitzer* Observations of IC 405" 2007, **ApJ**, v656
- 4) R. E. Lupu, **K. France**, and S. R. McCandliss "Discovery of Ly α Pumped Molecular Hydrogen Emission in the Planetary Nebulae NGC 6853 and NGC 3132" 2006, **ApJ**, v644
- 3) **K. France** & S. R. McCandliss "Molecular Hydrogen in Orion as Observed by the *Far Ultraviolet Spectroscopic Explorer*" 2005, **ApJL**, v629
- 2) **K. France**, B-G Andersson, S. R. McCandliss, P. D. Feldman "Fluorescent Molecular Hydrogen in IC 63: *FUSE*, HUT, and Rocket Observations" 2005, **ApJ**, v628
- 1) **K. France**, S. R. McCandliss, E. B. Burgh, P. D. Feldman "Rocket and *FUSE* Observations of IC 405: Differential Extinction and Fluorescent Molecular Hydrogen" 2004, **ApJ**, v616

Other Refereed Publications:

- 25) K. Redwine, ... **K. France, et al.** "New Gapless COS G140L Mode Proposed for Background-Limited Far-UV Observations", 2016, **PASP**, in press
- 24) C. Danforth, ... **K. France, et al.** "An HST/COS Survey of the Low-Redshift IGM. I. Survey, Methodology, & Overall Results", 2016, **ApJ**, v817
- 23) N. J.; Cunningham, ... **K. France, et al.** "Detection of Callisto's oxygen atmosphere with the Hubble Space Telescope", 2015, **Icarus**, v254
- 22) C. Fransson, ... **K. France, et al.** "The Destruction of the Circumstellar Ring of SN 1987A", 2015, **ApJL**, v806
- 21) C. Fransson, ... **K. France, et al.** "High-density Circumstellar Interaction in the Luminous Type II_n SN 2010jl: The First 1100 Days", 2014, **ApJ**, v797
- 20) A. I. Gómez de Castro, ... **K. France, ... et al.** "Building galaxies, stars, planets and the ingredients for life between the stars. The science behind the European Ultraviolet-Visible Observatory", 2014, **Ap&SS**, v354
- 19) G. H. Marion, ... **K. France, et al.** "Type II_b Supernova SN 2011dh: Spectra and Photometry from the Ultraviolet to the Near-infrared", 2014, **ApJ**, 781
- 18) D. Ardila, ... **K. France, et al.** "Hot Gas Lines in T Tauri Stars", 2013, **ApJS**, v207
- 17) C. Haswell, ... **K. France, et al.** "Near-ultraviolet Absorption, Chromospheric Activity, and Star-Planet Interactions in the WASP-12 system", 2012, **ApJ**, v760
- 16) B. Keeney, C. Danforth, J. Stocke, **K. France**, and J. Green "On the Significance of Absorption Features in HST/COS Data", 2012, **PASP**, v124
- 15) J. Linsky, R. Bushinsky, T. Ayres, and **K. France** "Ultraviolet Spectroscopy of Rapidly-Rotating Solar-Mass Stars: Emission Line Redshifts as a Test of the Solar-Stellar Connection", 2012, **ApJ**, v754

- 14) J. Green..., **K. France**, ... et al. "The Cosmic Origins Spectrograph", 2012, **ApJ**, v744
- 13) J. Linsky, R. Bushinsky, T. Ayres, J. Fontenla, and **K. France** "Far Ultraviolet Continuum Emission: Applying this Diagnostic to the Chromospheres of Solar-Mass Stars", 2012, **ApJ**, v745
- 12) **K. France** et al. "HST-COS Observations of the Transiting Extrasolar Planetary System HD 209458", 2011, *Ap&ss*, v335
- 11) L. Ingleby..., **K. France**, ... et al. "NUV Excess in Slowly Accreting T Tauri Stars: Limits Imposed by Chromospheric Emission", 2011, **ApJ**, v743
- 10) C. S. Froning, A. Cantrell, T. Maccarone, **K. France**, et al. "Multi-Wavelength Observations of A0620-00 in Quiescence", 2011, **ApJ**, v743
- 9) J. Larsson..., **K. France**, ... et al. "X-ray Illumination of the Ejecta of SN 1987A ", 2011, **Nature**, v474
- 8) A. Roy..., **K. France**, ... et al. "Deconvolution of Images from BLAST 2005: Insight into the K3-50 and IC 5146 Star-forming Regions ", 2011, **ApJ**, v730
- 7) A. Roy..., **K. France**, ... et al. "The Balloon-Borne Large Aperture Submillimeter Telescope (BLAST) 2005: A 10 deg² Survey of the Star Formation in Cygnus X ", 2011, **ApJ**, v727
- 6) C. Joblin..., **K. France**, ... et al. "Gas Morphologies and Energetics at the surface of PDRs: New Insights with *Herschel* Observations of NGC 7023", 2010, **A&A**, accepted
- 5) C. Dedes..., **K. France**, ... et al. "The Origin of the [C II] emission in the S140 PDR – New Insights from HIFI", 2010, **A&A**, accepted
- 4) A. Fuente..., **K. France**, ... et al. "*Herschel* Observations in the Ultracompact HII Region Mon R2: Water in Dense Photodissociation Regions", 2010, **A&A**, accepted
- 3) V. Ossenkopf..., **K. France**, ... et al. "Detection of Interstellar Oxidaniumyl: Abundant H₂O⁺ Towards the Star-Forming Regions DR21, Sgr B2, and NGC6334", 2010, **A&A**, v518

- 2) V. Ossenkopf..., **K. France**, ... et al. "HIFI Observations of Warm Gas in DR21: Shock versus Radiative Heating", 2010, **A&A**, v518
- 1) N. K. Lewis, T. A. Cook, Wilton, K. P., S. Chakrabarti, **K. France**, and K. D. Gordon "Far-Ultraviolet Dust Albedo Measurements in the Upper Scorpius Cloud Using the SPINR Sounding Rocket Experiment", 2009, **ApJ**, v706

Instrumentation Related Conference Proceedings and White Papers:

- 23) K. Hoadley, **K. France**, et al. "The re-flight of the Colorado high-resolution Echelle stellar spectrograph (CHESS): improvements, calibrations, and post-flight results", 2016, SPIE, 2016arXiv160604979H
- 22) **K. France**, E. Shkolnik et al. "Characterizing the Habitable Zones of Exoplanetary Systems with a Large Ultraviolet/Visible/Near-IR Space Observatory", 2015, Submitted in response to NASA call for white papers: "Large Astrophysics Missions to Be Studied by NASA Prior to the 2020 Decadal Survey", 2015arXiv150501840F
- 21) L. Fossati, ..., **K. France**, et al. "Characterising exoplanets and their environment with UV transmission spectroscopy", 2015, White paper submitted to STScI for Hubble's 2020 vision, 2015arXiv150301278F
- 20) B. Mazin, G. Becker, **K. France**, et al. "Science with KRAKENS", 2015, Instrumentation and Methods for Astrophysics, arXiv:1506.03458
- 19) J. Green & **K. France** "SubLymE: the sub-Lyman alpha explorer", 2014, SPIE, v9144
- 18) K. Hoadley, **K. France**, et al. "The assembly, calibration, and preliminary results from the Colorado high-resolution Echelle stellar spectrograph (CHESS)", 2014, SPIE, 9144
- 17) C. Moore, ..., **K. France** "Recent developments and results of new ultraviolet reflective mirror coatings", 2014, SPIE, v9144
- 16) A. Harwit, **K. France**, et al. "High event rate ROICs (HEROICs) for astronomical UV photon counting detectors", 2014, SPIE, v9145

- 15) **K. France**, N. Nell, et al. "Flight performance and First Results from the Sub-orbital Local Interstellar Cloud Experiment (SLICE)", 2013, SPIE, v8559
- 14) R. Kane, ... **K. France** "The opto-mechanical design of the Sub-orbital Local Interstellar Cloud Experiment", 2013, SPIE, v8559
- 13) **K. France**, M. Beasley, et al. "From Protoplanetary Disks to Extrasolar Planets: Understanding the Life Cycle of Circumstellar Gas with Ultraviolet Spectroscopy", 2012, NASA RFI response, 2012arXiv1208.2270F
- 12) J. Tumlinson, A. Aloisi, G. Kriss, **K. France**, S. McCandliss, et al. "Unique Astrophysics in the Lyman Ultraviolet", 2012, NASA RFI response, 2012arXiv1209.3272T
- 11) **K. France**, M. Beasley, et al. "Development of the Colorado High-Resolution Echelle Stellar Spectrograph (CHESS)", 2012, SPIE, v8443
- 10) R. Kane, ... **K. France** "The opto-mechanical design of the Colorado High-Resolution Echelle Stellar Spectrograph", 2011, SPIE, v8145
- 9) S. Osterman, ... **K. France**, et al. "The Cosmic Origins Spectrograph On-orbit Instrument Performance", 2011, Ap&SS, v335
- 8) S. Osterman, S. Penton, **K. France**, et al. "Observing below 1150 Å with *HST*: Extending the Cosmic Origins Spectrograph Coverage to 900 Å", 2010, HST Calibration Workshop
- 7) M. Beasley, E. B. Burgh, and **K. France** "CHESS: The Colorado High-resolution Echelle Stellar Spectrograph", 2010, SPIE, v7713
- 6) D. Sanhow...**K. France**, ... "Commissioning of the Cosmic Origins Spectrograph on the *Hubble Space Telescope*: an overview of COS servicing mission observatory verification", 2010, SPIE, v7713
- 5) J. B. McPhate, ...**K. France**,... et al. "HST-COS FUV Detector On-orbit Performance", 2010, SPIE, v7732
- 4) R. E. Lupu, S. R. McCandliss, B. Fleming, **K. France**, S. Nikzad "Calibration and Flight Performance of the Long-Slit Imaging Dual Order Spectrograph", 2008, SPIE, v7011

- 3) S. R. McCandliss, **K. France** et al. "FORTIS: Pathfinder to the Lyman Continuum", 2004, SPIE, v5488
- 2) S. R. McCandliss, **K. France**, R. Pelton, and P. D. Feldman "Long-Slit Imaging Dual-Order Spectrograph: LIDOS", 2003, SPIE, v4854
- 1) E. Burgh, S. R. McCandliss, R. Pelton, **K. France**, P. D. Feldman "Windowless Vacuum Ultraviolet Collimator", 2001, SPIE, v4498