

# Kai Zhang

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## Contact Information

Lawrence Berkeley National Lab,  
1 Cyclotron Rd, Berkeley  
CA, 94720

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## Research Interests

**Spectroscopic Sky Survey Focal Plane Instrument**  
**Fiber Positioner Research and Development**  
**Ionized Gas in Star-forming Galaxies, Early-Type Galaxies, and AGNs**  
**Diagnostic Diagrams and Metallicity Estimation**  
**AGN Outflows**  
**Application of Machine Learning Technics to astrophysics problems**  
**Parallel Computing**

## Experience

**May. 2017- Now: DESI Project Scientist**

**Lawrence Berkeley National Lab**

*Supervisor:* David Schlegel, Stephen Bailey, LBNL

*Work description:* Fiber positioner control software development,  
Fiber positioner anticollision algorithm development,  
Fiber positioner testing, MPI spectral pipeline implementation.  
Machine learning classifiers for intermediate redshift emission line galaxies classification.

**June. 2014 - April. 2017: MaNGA Operations Manager**

**University of Kentucky**

*Supervisor:* Prof. Renbin Yan, University of Kentucky

*Work description:* Developed the MaNGA QA pipeline for daily data quality monitoring.  
Studied the impact of diffuse ionized gas on line ratios,  
diagnostic diagrams and metallicity.

**July. 2012 - May, 2014: Post-doc**

**Shanghai Astronomical Observatory, China.**

*Supervisor:* Prof. Lei Hao, Shanghai Astronomical Observatory.

*Work description:* Developed the Kinematic-Excitation Diagram for  
classifying intermediate redshift emission line galaxies.

## Education

**Sept. 2007 - June. 2012: Ph.D student**

**Center for Astrophysics, University of Science and Technology, China.**

*Supervisor:* Prof. Tinggui Wang, Center for Astrophysics, USTC.

*Topic:* Partially Obscured QSO in SDSS, [OIII] emission in AGN

**Sept. 2003 - Jun. 2007: B.Sc**

**Department of Physics, University of Science and Technology, China.**

*Supervisor:* Prof. Tinggui Wang, Center for Astrophysics, USTC.

*Topic:* MgII fitting, Partially-Obscured QSO in SDSS.

## First-Author Publications

**Machine Learning Classifiers for Intermediate Redshift Emission Line Galaxies**, Kai Zhang, David J. Schlegel, Johan Comparat, Christoph Schäfer, Brett H. Andrews, Jose Antonio Vazquez Mata, Jean-Paul Kneib, Renbin Yan *2019ApJ*, 883, 63Z

**Dark Energy Spectroscopic Instrument (DESI) Fiber Positioner Thermal and Wind Disturbance Test**, Kai Zhang; Joseph H. Silber; Henry D. Heetderks; Daniela Leitner; Michael Schubnell; Michael Levi; Grady Wang; Kevin Fanning; Parker Fagrelus; Carl Dobson; Jessica Aguilar *SPIE Astronomical Telescopes + Instrumentation*, 2018, Austin, Texas, United States; *Proceedings Volume 10706, Advances in Optical and Mechanical Technologies for Telescopes and Instrumentation III*; 107064R (2018) <https://doi.org/10.1117/12.2314666>

**A New Diagnostic Diagram of Ionization Source for High Redshift Emission Line Galaxies**, Kai Zhang, Lei Hao, 2018 *ApJ* 856, 171

**SDSS-IV MaNGA: The Impact of Diffuse Ionized Gas on Emission-line Ratios, Interpretation of Diagnostic Diagrams, and Gas Metallicity Measurements**, Kai Zhang, Renbin Yan, Kevin Bundy, Matthew Bershad, L. Matthew Haffner, René Walterbos, Roberto Maiolino, Daniel Thomas, Niv Drory, Christy Tremonti, Francesco Belfiore, Sebastian F. Sánchez, Amy Jones, Aleksandar M. Diamond-Stanic, Dmitry Bizyaev, Christian Nitschelm, Brett Andrews, Jon Brinkmann, Joel R. Brownstein, Edmond Cheung, Cheng Li, David R. Law, Alexandre Roman Lopes, Daniel Oravetz, Kaike Pan, Thaisa Storchi-Bergmann, Audrey Simmons 2017 *MNRAS* 466, 3217

**Connection Between Mid-Infrared Emission Properties and Narrow Line Region Outflows in Type 1 Active Galactic Nuclei**, Kai Zhang, Tinggui Wang, Lin Yan, Xiao-bo Dong, 2013 *ApJ* 768, 22

**The Baldwin Effect in the Narrow Emission Lines of Active Galactic Nuclei**, Kai Zhang, Tinggui Wang, C. Martin Gaskell, Xiao-bo Dong, 2013 *ApJ* 762, 51

**Blueshifting and Baldwin effects for [O III] $\lambda$ 5007**, Kai Zhang, Xiao-bo Dong, Tinggui Wang, C. Martin Gaskell. 2011 *ApJ* 737, 71

**Difference in Narrow-Emission-Line Spectra of Seyfert 1 and 2 Galaxies**, Kai Zhang, Tinggui Wang, Xiao-bo Dong, Honglin Lu, 2008 *ApJ* 685, 109.

**Exploring the Partially-Obscured BLR and Partially-Covered NLR**, Kai Zhang, Tinggui Wang, Xiao-bo Dong, [arXiv:0902.4390](https://arxiv.org/abs/0902.4390), The Starburst-AGN Connection. ASP Conference Series, Vol. 408

*Co-author  
Publications  
(selected)*

**Overview of the DESI Legacy Imaging Surveys**, Dey, Arjun; Schlegel, David J.; Lang, Dustin; Blum, Robert; Burleigh, Kaylan; Fan, Xiaohui; Findlay, Joseph R.; Finkbeiner, Doug; Herrera, David; Juneau, Stphanie; Landriau, Martin; Levi, Michael; McGreer, Ian; Meisner, Aaron; Myers, Adam D.; Moustakas, John; Nugent, Peter; Patej, Anna; Schlafly, Edward F.; Walker, Alistair R.; Valdes, Francisco; Weaver, Benjamin A.; Yche, Christophe; Zou, Hu; Zhou, Xu; Abareshi, Behzad; Abbott, T. M. C.; Abolfathi, Bela; Aguilera, C.; Alam, Shadab; Allen, Lori; Alvarez, A.; Annis, James; Ansarinejad, Behzad; Aubert, Marie; Beechert, Jacqueline; Bell, Eric F.; BenZvi, Segev Y.; Beutler, Florian; Bielby, Richard M.; Bolton, Adam S.; Briceo, Csar; Buckley-Geer, Elizabeth J.; Butler, Karen; Calamida, Annalisa; Carlberg, Raymond G.; Carter, Paul; Casas, Ricard; Castander, Francisco J.; Choi, Yumi; Comparat, Johan; Cukanovaite, Elena; Delubac, Timothe; DeVries, Kaitlin; Dey, Sharmila; Dhungana, Govinda; Dickinson, Mark; Ding, Zhejie; Donaldson, John B.; Duan, Yutong; Duckworth, Christopher J.; Eftekharzadeh, Sarah; Eisenstein, Daniel J.; Etourneau, Thomas; Fagrelus, Parker A.; Farihi, Jay; Fitzpatrick, Mike; Font-Ribera, Andreu; Fulmer, Leah; Gnsicke, Boris T.; Gaztanaga, Enrique; George, Koshy; Gerdes, David W.; Gontcho, Satya Gontcho A.; Gorgoni, Claudio; Green, Gregory; Guy, Julien; Harmer, Diane; Hernandez, M.; Honscheid, Klaus; Huang, Lijuan Wendy; James, David J.; Jannuzi, Buell T.; Jiang, Linhua; Joyce, Richard; Karcher, Armin; Karkar, Sonia; Kehoe, Robert; Kneib, Jean-Paul; Kueter-Young, Andrea; Lan, Ting-Wen; Lauer, Tod R.; Le Guillou, Laurent; Le Van Suu, Auguste; Lee, Jae Hyeon; Lesser, Michael; Perreault Levasseur, Laurence; Li, Ting S.; Mann, Justin L.; Marshall, Robert; Martinez-Vazquez, C. E.; Martini, Paul; du Mas des Bourboux, Hlion; McManus, Sean; Meier, Tobias Gabriel; Mnard, Brice; Metcalfe, Nigel; Muoz-Gutierrez, Andrea; Najita, Joan; Napier, Kevin; Narayan, Gautham; Newman, Jeffrey A.; Nie, Jundan; Nord, Brian; Norman, Dara J.; Olsen, Knut A. G.; Paat, Anthony; Palanque-Delabrouille, Nathalie; Peng, Xiyang; Poppett, Claire L.; Poremba, Megan R.; Prakash, Abhishek; Rabinowitz, David; Raichoor, Anand; Rezaie, Mehdi; Robertson, A. N.; Roe, Natalie A.; Ross, Ashley J.; Ross, Nicholas P.; Rudnick, Gregory; Safonova, Sasha; Saha, Abhijit; Sanchez, F. Javier; Savary, Elodie; Schweiker, Heidi; Scott, Adam; Seo, Hee-Jong; Shan, Huanyuan; Silva, David R.; Slepian, Zachary; Soto, Christian; Sprayberry, David; Staten, Ryan; Stillman, Coley M.; Stupak, Robert J.; Summers, David L.; Sien Tie, Suk; Tirado, H.; Vargas-Magaa, Mariana; Vivas, A. Katherine; Wechsler, Risa H.; Williams, Doug; Yang, Jinyi; Yang, Qian; Yapici, Tolga; Zaritsky, Dennis;

Zenteno, A.; **Zhang, Kai**; Zhang, Tianmeng; Zhou, Rongpu; Zhou, Zhimin 2019AJ, 157, 168D

**DESI fiber positioner testing and performance**, Michael Schubnell; Jessica Aguilar ; Jon Ameel; Stefane Caseiro; Kevin Fanning; Brandon Freudenstein; Irena Gershkovich; Henry Heetderks; Philipp Hrlr; Daniela Leitner; Michael Levi; Joseph Silber; Zhiquan Sun; Gregory Tarl; Curtis Weaverdyck; **Kai Zhang**; David Brooks SPIE Astronomical Telescopes + Instrumentation, 2018, Austin, Texas, United States; Proceedings Volume 10706, Advances in Optical and Mechanical Technologies for Telescopes and Instrumentation III; 107062A (2018) <https://doi.org/10.1117/12.2311573>

**Dark energy spectroscopic instrument (DESI) fiber positioner production**, Daniela Leitner; Jessica Aguilar; Jon Ameel; Robert Besuner; Todd Claybaugh; Henry Heetderks; Michael Schubnell; Jean-Paul Kneib; Joseph Silber; Gregory Tarl; Curtis Weaverdyck; **Kai Zhang** SPIE Astronomical Telescopes + Instrumentation, 2018, Austin, Texas, United States; Proceedings Volume 10706, Advances in Optical and Mechanical Technologies for Telescopes and Instrumentation III; 1070669 (2018) <https://doi.org/10.1117/12.2312228>

**SDSS-IV MaNGA: A Serendipitous Observation of a Potential Gas Accretion Event**, 2016 ApJ, 832, 182, Cheung, Edmond; Stark, David V.; Huang, Song; Rubin, Kate H. R.; Lin, Lih-wai; Tremonti, Christy; **Zhang, Kai**; Yan, Renbin; Bizyaev, Dmitry; Boquien, Mdric; Brownstein, Joel R.; Drory, Niv; Gelfand, Joseph D.; Knapen, Johan H.; Maiolino, Roberto; Malanushenko, Olena; Masters, Karen L.; Merrifield, Michael R.; Pace, Zach; Pan, Kaike; Riffel, Rogemar A.; Roman-Lopes, Alexandre; Rujopakarn, Wiphu; Schneider, Donald P.; Stott, John P.; Thomas, Daniel; Weijmans, Anne-Marie

**SDSS-IV MaNGA IFS Galaxy Survey — Survey Design, Execution, and Initial Data Quality**, 2016AJ, 152, 197Y, Yan, Renbin; Bundy, Kevin; Law, David R.; Bershad, Matthew A.; Andrews, Brett; Cherinka, Brian; Diamond-Stanic, Aleksandar M.; Drory, Niv; MacDonald, Nicholas; Snchez-Gallego, Jos R.; Thomas, Daniel; Wake, David A.; Weijmans, Anne-Marie; Westfall, Kyle B.; **Zhang, Kai**; Aragn-Salamanca, Alfonso; Belfiore, Francesco; Bizyaev, Dmitry; Blanc, Guillermo A.; Blanton, Michael R.; Brownstein, Joel; Cappellari, Michele; D’Souza, Richard; Emsellem, Eric; Fu, Hai; Gaulme, Patrick; Graham, Mark T.; Goddard, Daniel; Gunn, James E.; Harding, Paul; Jones, Amy; Kinemuchi, Karen; Li, Cheng; Li, Hongyu; Maiolino, Roberto; Mao, Shude; Maraston, Claudia; Masters, Karen; Merrifield, Michael R.; Oravetz, Daniel; Pan, Kaike; Parejko, John K.; Sanchez, Sebastian F.; Schlegel, David; Simmons, Audrey; Thanjavur, Karun; Tinker, Jeremy; Tremonti, Christy; van den Bosch, Remco; Zheng, Zheng

**SDSS-IV/MaNGA: Spectrophotometric Calibration Technique**, 2016 AJ, 151, 8, Yan, Renbin; Tremonti, Christy; Bershad, Matthew A.; Law, David R.; Schlegel, David J.; Bundy, Kevin; Drory, Niv; MacDonald, Nicholas; Bizyaev, Dmitry; Blanc, Guillermo A.; Blanton, Michael R.; Cherinka, Brian; Eigenbrot, Arthur; Gunn, James E.; Harding, Paul; Hogg, David W.; Snchez-Gallego, Jos R.; Snchez, Sebastian F.; Wake, David A.; Weijmans, Anne-Marie; Xiao, Ting; **Zhang, Kai**

**The Data Reduction Pipeline for the SDSS-IV MaNGA IFU Galaxy Survey**, 2016 AJ, 152, 83, Law, David R.; Cherinka, Brian; Yan, Renbin; Andrews, Brett H.; Bershad, Matthew A.; Bizyaev, Dmitry; Blanc, Guillermo A.; Blanton, Michael R.; Bolton, Adam S.; Brownstein, Joel R.; Bundy, Kevin; Chen, Yanmei; Drory, Niv; D’Souza, Richard; Fu, Hai; Jones, Amy; Kauffmann, Guinevere; MacDonald, Nicholas; Masters, Karen L.; Newman, Jeffrey A.; Parejko, John K.; Snchez-Gallego, Jos R.; Snchez, Sebastian F.; Schlegel, David J.; Thomas, Daniel; Wake, David A.; Weijmans, Anne-Marie; Westfall, Kyle B.; **Zhang, Kai**

**The Data Reduction Pipeline for the SDSS-IV MaNGA IFU Galaxy Survey**, 2016 AJ, 152, 83, Law, David R.; Cherinka, Brian; Yan, Renbin; Andrews, Brett H.; Bershad, Matthew A.; Bizyaev, Dmitry; Blanc, Guillermo A.; Blanton, Michael R.; Bolton, Adam S.; Brownstein, Joel R.; Bundy, Kevin; Chen, Yanmei; Drory, Niv; D’Souza, Richard; Fu, Hai; Jones, Amy; Kauffmann, Guinevere; MacDonald, Nicholas; Masters, Karen L.; Newman, Jeffrey A.; Parejko, John K.; Snchez-Gallego, Jos R.; Snchez, Sebastian F.; Schlegel, David J.; Thomas, Daniel; Wake, David A.; Weijmans, Anne-Marie; Westfall, Kyle B.; **Zhang, Kai**

**SDSS-IV/MaNGA: Spectrophotometric Calibration Technique**, 2015 *AJ*, 150, 19, Law, David R.; Yan, Renbin; Bershad, Matthew A.; Bundy, Kevin; Cherinka, Brian; Drory, Niv; MacDonald, Nicholas; Snchez-Gallego, Jos R.; Wake, David A.; Weijmans, Anne-Marie; Blanton, Michael R.; Klaene, Mark A.; Moran, Sean M.; Sanchez, Sebastian F.; **Zhang, Kai**

**Observing Strategy for the SDSS-IV/MaNGA IFU Galaxy Survey**, 2015 *MNRAS*, 449, 867, Law, David R.; Yan, Renbin; Bershad, Matthew A.; Bundy, Kevin; Cherinka, Brian; Drory, Niv; MacDonald, Nicholas; Snchez-Gallego, Jos R.; Wake, David A.; Weijmans, Anne-Marie; Blanton, Michael R.; Klaene, Mark A.; Moran, Sean M.; Sanchez, Sebastian F.; **Zhang, Kai**

**P-MaNGA Galaxies: emission-lines properties - gas ionization and chemical abundances from prototype observations**, 2015 *MNRAS*, 449, 867, Belfiore, F.; Maiolino, R.; Bundy, K.; Thomas, D.; Maraston, C.; Wilkinson, D.; Snchez, S. F.; Bershad, M.; Blanc, G. A.; Bothwell, M.; Cales, S. L.; Coccato, L.; Drory, N.; Emsellem, E.; Fu, H.; Gelfand, J.; Law, D.; Masters, K.; Parejko, J.; Tremonti, C.; Wake, D.; Weijmans, A.; Yan, R.; Xiao, T.; **Zhang, K.**; Zheng, T.; Bizyaev, D.; Kinemuchi, K.; Oravetz, D.; Simmons, A

**P-MaNGA: full spectral fitting and stellar population maps from prototype observations**, 2015 *MNRAS*, 449, 328, Wilkinson, David M.; Maraston, Claudia; Thomas, Daniel; Coccato, Lodovico; Tojeiro, Rita; Cappellari, Michele; Belfiore, Francesco; Bershad, Matthew; Blanton, Mike; Bundy, Kevin; Cales, Sabrina; Cherinka, Brian; Drory, Niv; Emsellem, Eric; Fu, Hai; Law, David; Li, Cheng; Maiolino, Roberto; Masters, Karen; Tremonti, Christy; Wake, David; Wang, Enci; Weijmans, Anne-Marie; Xiao, Ting; Yan, Renbin; **Zhang, Kai**; Bizyaev, Dmitry; Brinkmann, Jonathan; Kinemuchi, Karen; Malanushenko, Elena; Malanushenko, Viktor; Oravetz, Daniel; Pan, Kaike; Simmons, Audrey

**P-MaNGA: Gradients in Recent Star Formation Histories as Diagnostics for Galaxy Growth and Death**, 2015 *ApJ*, 804, 125, Li, Cheng; Wang, Enci; Lin, Lin; Bershad, Matthew A.; Bundy, Kevin; Tremonti, Christy A.; Xiao, Ting; Yan, Renbin; Bizyaev, Dmitry; Blanton, Michael; Cales, Sabrina; Cherinka, Brian; Cheung, Edmond; Drory, Niv; Emsellem, Eric; Fu, Hai; Gelfand, Joseph; Law, David R.; Lin, Lihwai; MacDonald, Nick; Maraston, Claudia; Masters, Karen L.; Merrifield, Michael R.; Pan, Kaike; Snchez, S. F.; Schneider, Donald P.; Thomas, Daniel; Wake, David; Wang, Lixin; Weijmans, Anne-Marie; Wilkinson, David; Yoachim, Peter; **Zhang, Kai**; Zheng, Tiantian

**Overview of the SDSS-IV MaNGA Survey: Mapping nearby Galaxies at Apache Point Observatory**, 2015 *ApJ*, 798, 7, Bundy, Kevin; Bershad, Matthew A.; Law, David R.; Yan, Renbin; Drory, Niv; MacDonald, Nicholas; Wake, David A.; Cherinka, Brian; Snchez-Gallego, Jos R.; Weijmans, Anne-Marie; Thomas, Daniel; Tremonti, Christy; Masters, Karen; Coccato, Lodovico; Diamond-Stanic, Aleksandar M.; Aragn-Salamanca, Alfonso; Avila-Reese, Vladimir; Badenes, Carles; Falcn-Barroso, Jsus; Belfiore, Francesco; Bizyaev, Dmitry; Blanc, Guillermo A.; Bland-Hawthorn, Joss; Blanton, Michael R.; Brownstein, Joel R.; Byler, Nell; Cappellari, Michele; Conroy, Charlie; Dutton, Aaron A.; Emsellem, Eric; Etherington, James; Frinchaboy, Peter M.; Fu, Hai; Gunn, James E.; Harding, Paul; Johnston, Evelyn J.; Kauffmann, Guinevere; Kinemuchi, Karen; Klaene, Mark A.; Knapen, Johan H.; Leauthaud, Alexie; Li, Cheng; Lin, Lihwai; Maiolino, Roberto; Malanushenko, Viktor; Malanushenko, Elena; Mao, Shude; Maraston, Claudia; McDermid, Richard M.; Merrifield, Michael R.; Nichol, Robert C.; Oravetz, Daniel; Pan, Kaike; Parejko, John K.; Sanchez, Sebastian F.; Schlegel, David; Simmons, Audrey; Steele, Oliver; Steinmetz, Matthias; Thanjavur, Karun; Thompson, Benjamin A.; Tinker, Jeremy L.; van den Bosch, Remco C. E.; Westfall, Kyle B.; Wilkinson, David; Wright, Shelley; Xiao, Ting; **Zhang, Kai**

**Outflow and hot dust emission in high redshift quasars**, 2013 *ApJ*, 776, 15, Huiyuan Wang, Feijun Xing, **Kai Zhang**, Tinggui Wang, Hongyan Zhou, Shaohua Zhang

**On the nature of X-ray "unobscured" Seyfert 2 galaxies**, *Science China Physics, Mechanics and Astronomy*, Volume 55, Issue 12, Ying Tan, Junxian Wang, **Kai Zhang**

**Estimating Black Hole Masses in Active Galactic Nuclei Using the MgII 2800 Emission Line**, 2009 *ApJ*, 706, 1-13, Jian-Guo Wang, Xiao-Bo Dong, Ting-Gui Wang, Luis C. Ho, Weimin

Yuan, Huiyuan Wang, **Kai Zhang**, Shaohua Zhang, Hongyan Zhou

**The Correlation Between X-ray and UV Properties of BAL QSOs**, 2009 *ApJ*, 690, 1006,  
Lulu Fan, Huiyuan Wang, Tinggui Wang, Junxian Wang, Xiao-bo Dong, **Kai Zhang**, Fuzhen Cheng

**Broad-line Balmer decrements in blue active galactic nuclei**, 2008 *MNRAS*, 383, 581, Xiaobo  
Dong, Tinggui Wang, Jianguo Wang, Weimin Yuan, Hongyan Zhou, Haifeng Dai, **Kai Zhang**

*Observing  
Experience*

**Lijiang 2.4m telescope**, 5 nights.  
**Apache Point Observatory, 2.5 meter telescope**, 5 nights.  
**Blanco Telescope (remotely at NOAO)**, 2 nights.  
**Mayall 4-meter telescope**, 3 nights.

*Grants*

**China Postdoctoral Grant**, 50K RMB ( ~ 8K USD).

*Honors & Awards*

**Referee for ApJ, MNRAS, A&A and RAA**  
**SDSS-IV Architect** April, 2016.  
**Zhu Li Yue Hua Scholarship** for excellent graduate student. May, 2012.  
**CASC Scholarship** for excellent graduate student. Oct, 2008.

*Conferences and  
Talks*

**DESI Lunch Talk**

Feb 20, 2019, Berkeley, CA, USA .

Title of Talk: ‘DESI Fiber Positioner Anticollision: Algorithm and Performance’

**DESI Lunch Talk**

Jan 17, 2018, Berkeley, CA, USA .

Title of Talk: ‘DESI Fiber Positioner Performance’

**Seminar at University of Kentucky**

Oct 6, 2016, Lexington, KY, USA .

Title of Talk: ‘The Impact of Diffuse Ionized Gas on Emission-line Ratios, Interpretation of Diagnostic Diagrams, and Gas Metallicity Measurements’

**Seminar at Tsinghua University**

Sep 28, 2016, Beijing, China.

Title of Talk: ‘The Impact of Diffuse Ionized Gas on Emission-line Ratios, Interpretation of Diagnostic Diagrams, and Gas Metallicity Measurements’

**Seminar at Nanjing University**

Sep 12, 2016, Nanjing, Jiangsu, China.

Title of Talk: ‘The Impact of Diffuse Ionized Gas on Emission-line Ratios, Interpretation of Diagnostic Diagrams, and Gas Metallicity Measurements’

**Seminar at University of Science and Technology of China**

Sep 7, 2016, Hefei, Anhui, China.

Title of Talk: ‘The Impact of Diffuse Ionized Gas on Emission-line Ratios, Interpretation of Diagnostic Diagrams, and Gas Metallicity Measurements’

**2016 SDSS-IV Collaboration Meeting**

June 26-30, 2016, Madison, Wisconsin, USA.

Title of Talk: ‘The Impact of Diffuse Ionized Gas on Emission-line Ratios, Interpretation of Diagnostic Diagrams, and Gas Metallicity Measurements’

**The Interplay Between Local and Global Processes in Galaxies**

11th-15th April, 2016, Cozumel, Mexico.  
Title of Poster and lightening talk: “The Impact of Diffuse Ionized Gas on Emission-line Ratios, Interpretation of Diagnostic Diagrams, and Gas Metallicity Measurements”

**227th AAS Meeting**

Jan 4th-8th, 2016, Kissimmee, Florida, USA.  
Title of Talk: “The Impact of Diffuse Ionized Gas on Emission-line Ratios and Gas Metallicity Measurements”

**MaNGA Collaboration Meeting**

30 Mar-2 Apr, 2015, Lexington, KY, USA.  
Title of Talk: “Beam Smearing Effect for MaNGA survey”

**2015 SDSS-IV Collaboration Meeting**

July 27-29, 2015, Deer Valley, Utah, USA.

**Dissecting Galaxies with 2D Wide-field Spectroscopy**

March.25-29, 2013, Lijiang, Yunnan, China.  
Title of Talk: “A New Classification Diagram for High Redshift Emission Line Galaxies”

**Cross-Strait Astrophysics Symposium**

December.6-8, 2013, Xiamen, Fujian, China.  
Title of Talk: “The Ionized Gas Kinematics of SDSS Galaxies”

**Workshop on WISE**

April.10, 2011, Shanghai Observatory, China.

**5th Annual Conference of Black Hole Astrophysics**

April. 27, 2010 - April. 27, 2010, Xiamen, Fujian, China.  
Title of Talk: “[OIII] emission in AGN”

**Conference for Starburst-AGN Connection.**

Oct. 27, 2008 - Oct. 31, 2008, Shanghai, China.  
Title of Poster: “Exploring the Partially-observed BLR and Partially-blocked NLR”

**Annual Meeting of the Chinese Astronomical Society.**

Oct. 16, 2007 - Oct. 19, 2007, Guangzhou, China.  
Title of Talk: “Partially-Obscured QSO in SDSS”

*Languages*

**English, Mandarin Chinese**

*Mentoring*

Jun, 2017 - Sep, 2017  
Supervising undergraduate student **Gradey Wong from UC Berkeley:**  
Jun, 2015 - Aug, 2015  
Supervising undergraduate student **Dadbeh Shaddel from Berea College:** *Optimizing SDSS 2.5 meter telescope focus.*

*Teaching  
Experience*

Sept, 2011 - Jan, 2012  
**Teaching Assistant** for graduate course: *Data analysis and reduction.*  
Sept, 2008 - Jan, 2009  
**Teaching Assistant** for undergraduate course: *Mechanics.*  
Sept, 2007 - Jan, 2008  
**Teaching Assistant** for undergraduate course: *Electro-magnetics.*

*Skills*

**Excellent:** Python, IDL, Javascript  
**Good:** C, C++, L<sup>A</sup>T<sub>E</sub>X.  
**Basic:** Fortran