

## Publication List

Refereed (10) and first author (3) papers

- 2020      “The properties of dwarf spheroidal galaxies in the Cen A group: Stellar populations, internal dynamics, and a heart-shaped H  $\alpha$  ring”  
Müller, O.; Fahrion, K.; Rejkuba, M.; Hilker, M.; Lelli, F.; **Lutz, K.**;  
Pawlowski, M. S.; Coccato, L.; Anand, G. S. and Jerjen, H., 2020, A&A, in  
press
- 2020      “The HIX galaxy survey III: The gas-phase metallicity in HI eXtreme  
galaxies”  
**Lutz, K. A.**; Kilborn, V. A.; Catinella, B.; Cortese, L.; Brown T. H.;  
Koribalski, B. S., 2020, A&A, 635, A69
- 2019      "Angular momentum regulates H I gas content and H I central hole size in  
the discs of spirals"  
Murugesan, C.; Kilborn, V.; Obreschkow, D.; Glazebrook, K.; **Lutz, K.**;  
Džudžar, R.; Dénes, H., 2019, MNRAS, 483, 2398
- 2018      “The HIX galaxy survey II: HI kinematics of HI eXtreme galaxies”  
**Lutz, K. A.**; Kilborn, V. A.; Koribalski, B. S.; Catinella, B.; Józsa, G. I. G.;  
Wong, O. I.; Stevens, A. R. H.; Obreschkow, D.; Dénes, H., 2018, MNRAS,  
476, 3744
- 2017      “The HIX galaxy survey I: Study of the most gas rich galaxies from HIPASS”  
**Lutz, K. A.**; Kilborn, V. A.; Catinella, B.; Koribalski, B. S.; Brown, T. H.;  
Cortese, L.; Dénes, H.; Józsa, G. I. G.; Wong, O. I., 2017, MNRAS, 467,  
1083
- 2017      “xCOLD GASS: the complete IRAM-30m legacy survey of molecular gas for  
galaxy evolution studies”  
Saintonge, A.; Catinella, B.; Tacconi, L. J.; Kauffmann, G.; Genzel, R.;  
Cortese, L.; Davé, R.; Fletcher, T. J.; Graciá-Carpio, J.; Kramer, C.;  
Heckman, T. M.; Janowiecki, S.; **Lutz, K.**; Rosario, D.; Schiminovich, D.;  
Schuster, K.; Wang, J.; Wuyts, S.; Borthakur, S.; Lamperti, I.; Roberts-  
Borsani, G. W., 2017, ApJS, 233, 22
- 2017      “Deriving a multivariate  $\alpha$ CO conversion function using the [CII]/CO(1-0)  
ratio and its application to molecular gas scaling relations”  
Accurso, G.; Saintonge, A.; Catinella, B.; Cortese, L.; Davé, R.; Dunsheath,  
S. H.; Genzel, R.; Gracia-Carpio, J.; Heckman, T. M.; Jimmy; Kramer, C.; Li,  
Cheng; **Lutz, K.**; Schiminovich, D.; Schuster, K.; Sternberg, A.; Sturm, E.;  
Tacconi, L. J.; Tran, K. V.; Wang, J., 2017, MNRAS, 470, 4750
- 2016      “Molecular and atomic gas along and across the main sequence of star-  
forming galaxies”  
Saintonge, A.; Catinella, B.; Cortese, L.; Genzel, R.; Giovanelli, R.; Haynes,  
M. P.; Janowiecki, S.; Kramer, C.; **Lutz, K. A.**; Schiminovich, D.; Tacconi, L.  
J.; Wuyts, S.; Accurso, G., 2016, MNRAS, 462, 1749

- 2016 [“Local Volume TiNy Titans: gaseous dwarf-dwarf interactions in the Local Universe”](#)  
Pearson, S.; Besla, G.; Putman, M. E.; **Lutz, K. A.**; Fernández, X.; Stierwalt, S.; Patton, D. R.; Kim, J.; Kallivayalil, N.; Johnson, K.; Sung, E.-C. et. al., 2016, MNRAS, 459, 1827
- 2016 [“Angular Momentum Regulates Atomic Gas Fractions of Galactic Disks”](#)  
Obreschkow, D.; Glazebrook, K.; Kilborn, V.; **Lutz, K.**, 2016, ApJ, 824, 26
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Non-refereed (2) and submitted (3) papers, blog posts (4)

- 2020 [“Radio data archives round table”](#)  
**Lutz, K. A.**; Dempsey, J.; Grange, Y.; Kettenis, M.; Lacy, M. and Schollar, C., 2020, ASPC, submitted
- 2020 [“Spreading the word – current status of VO tutorials and schools”](#)  
**Lutz, K. A.**; Allen, M.; Bot, C.; Cortés-Contreras, M.; Derriere, S.; Demleitner, M.; Heinl, H.; Jiménez-Esteban, F.; Molinario, M.; Nebot, A.; Solano, E. and Taylor, M., 2020, ASPC, submitted
- 2020 [“xCOLD GASS & xGASS: Radial metallicity gradients and global properties on the star-forming main sequence”](#)  
**Lutz, K. A.**; Saintonge, A.; Catinella, B.; Cortese, L.; Eisenhauer, F.; Kramer, C.; Moran, S. M.; Tacconi, L. J.; Vollmer, B.; Wang, J., A&A, submitted
- 2020 [“The CDS and Python”](#)  
**Lutz, K. A.**; Allen, M.; Baumann, M.; Boch, T.; Bot, C.; Derriere, S.; Nebot, A., four-part blog post on [astrobetter.com](#)
- 2019 [“Exploring Time Domain Multi-Messenger Astronomy through the Virtual Observatory”](#)  
Nebot, A.; Allen, M.G.; Fernique, P.; Baumann, M.; Boch, T.; Bot, C.; Derriere, S.; Genova, F.; **Lutz, K.**, 2019, Proceedings of Science, 357, 56
- 2019 [“VO for everyone – Getting ready for the 4<sup>th</sup> ASTERICS DADI VO School”](#)  
**Lutz, K. A.**; Nebot, A.; Allen, M. G.; Derriere, S., 2019, ASPC, 523, 657
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### Conference contributions

Contributed Talks

- 07/20 “The CDS in a notebook - Accessing CDS services with Python tools” at EAS annual meeting 2020, Leiden/virtual (NLD)
- 10/19 “How to write a paper in a Jupyter notebook” at .Astronomy, Toronto (CAN)
- 07/19 “The HI content of nearby galaxies” at Nine billion years of neutral gas evolution/MIAPP, Garching (GER)
- 06/19 “How dynamics determine the HI content of galaxies” at EWASS, Lyon (FRA)

- 02/19 “Radio data and VO – thoughts of an astronomer” at the Asterics Tech Forum, Strasbourg (FRA)
- 01/19 “mm-cm excess in local galaxies“ at the IRAM France Day, Paris (FRA)
- 07/16 “The HIX Galaxy Survey: The most HI rich Galaxies in the Southern Hemisphere” at Discs in Galaxies, ESO, Garching (GER)
- 07/16 “The HIX Galaxy Survey: The most HI rich Galaxies in the Southern Hemisphere” at Astronomical Society of Australia annual scientific meeting, University of Sydney, Sydney (AUS)
- 06/15 “How galaxies accrete gas and form stars – the HIX galaxy survey” at Many pathways to galaxy growth, Monash University, Prato (ITA)
- 05/15 “How galaxies accrete gas and form stars – the HIX galaxy survey” at Multiwavelength dissection of galaxies, Australian Astronomical Observatory and the CSIRO Astronomy and Space Science, Coogee Beach (AUS)
- 11/14 “Dissecting the GRUS quartet” at The periphery of discs, CSIRO Astronomy and Space Science, Sydney (AUS)

#### Contributed Birds-of-a-feather session

- 11/20 “Radio data archives round table” at ADASS 2020, Granada/ virtual (ESP)

#### Contributed Posters

- 11/20 “Spreading the word – current status of VO tutorials and schools” at ADASS 2020, Granada/ virtual (ESP)
- 06/20 “The specific angular momentum – mass correlation for stars, HI and baryons in nearby galaxies” at EAS annual meeting 2020, Leiden/virtual, (NLD)
- 06/20 “How some gas just doesn’t contribute to star formation” at EAS annual meeting 2020, Leiden/virtual, (NLD)
- 11/18 “VO for everyone - Getting ready for the 4<sup>th</sup> ASTERICS DADI VO school” at ADASS 2018, University of Maryland, (USA)
- 08/18 “The HIX survey” and “xGASS/xCOLDGASS – metallicity gradients in nearby galaxies” at IAU General Assembly 2018, Vienna, (AUT)
- 09/14 “The HIX galaxy survey” at The role of Hydrogen in the evolution of galaxies, Swinburne University of Technology, Kuching, (MYS)
- 07/14 “The HIX galaxy survey” at ASA annual scientific meeting, Macquarie University, Sydney, (AUS)

#### Invited talks at institutes

- 07/20 Astron virtual Colloquium, Astron, Dwingeloo, (NLD)  
Talk title: “Average and not so average HI discs in the nearby Universe”
- 04/18 Colloquium, Observatoire Astronomique de Strasbourg, Strasbourg, (FRA)  
Talk title: “The HIX galaxy survey – How HI eXtreme galaxies maintain their HI reservoir”

- 06/15 The Lunch Talk series, ESO, Garching, (GER)  
Talk title: "How galaxies accrete gas and form stars – The HIX galaxy survey"
- 06/15 The Tea Meeting talk series, Infrared group, MPE, Garching, (GER)  
Talk title: "How galaxies accrete gas and form stars – The HIX galaxy survey"