

#### **Curriculum Vitae**

## Pedro Bernardino Lacerda Cruz

Pedro Bernardino Lacerda Cruz obtained a master in Physics in 2000 at the University of Lisbon, and a PhD in Astronomy and Astrophysics in 2005 at Leiden University. He mas awarded a Royal Society Newton Fellowship in 2008 and was Max Planck Research Group Leader from 2013 to 2016. Pedro works in the area of exact sciences, physics and astronomy. In his Ciência Vitae the most common keywords in terms of scientific, technological and cultural production are: Kuiper Belt; Comets; Planetary Science; Solar System.

Pedro Bernardino Lacerda Cruz concluiu a Licenciatura em Física em 2000 pela Faculdade de Ciências da Universidade de Lisboa e PhD em Astronomy and Astrophysics em 2005 pela Universiteit Leiden. Recebeu 1 prémio da Royal Society e foi Max Planck Research Group Leader. Atua na área de Ciências Exatas, Física com ênfase em Astronomia. No seu currículo Ciência Vitae os termos mais frequentes no contexto da produção científica, tecnológica e artístico-cultural são: Kuiper Belt; Comets; Planetary Science; Solar System.

## Identification

#### Personal identification

Full name Pedro Bernardino Lacerda Cruz

Gender Male

Birth date 1975/03/27

#### **Citation names**

Pedro Lacerda

#### **Author identifiers**

Ciência ID 601F-21C5-E180 ORCID ID 0000-0002-1708-4656

#### **Email addresses**

lacerda.pedro@gmail.com (Professional)

#### **Addresses**

Middelweg 48, 7413 RZ Deventer, Deventer, Netherlands (Professional)

#### **Websites**

https://lacerdapedro.wordpress.com (Professional)

# **Knowledge fields**

Exact Sciences - Physical Sciences - Astronomy

# Languages

Language	Speaking	Reading	Writing	Listening	Peer-review
Portuguese (Mother tongue)					
English	Proficiency (C2)	Proficiency (C2)	Proficiency (C2)	Proficiency (C2)	Proficiency (C2)
Dutch	Upper intermediate (B2)	Upper intermediate (B2)	Upper intermediate (B2)	Advanced (C1)	Upper intermediate (B2)
French	Intermediate (B1)	Advanced (C1)	Intermediate (B1)	Intermediate (B1)	Intermediate (B1)
Italian	Upper intermediate (B2)	Advanced (C1)	Intermediate (B1)	Advanced (C1)	Intermediate (B1)
Spanish; Castilian	Elementary (A2)	Advanced (C1)	Elementary (A2)	Upper intermediate (B2)	Intermediate (B1)
German	Beginner (A1)	Elementary (A2)	Beginner (A1)	Beginner (A1)	

_						•	
E	~	ш	-	-		1	
			۱.	<b>a</b>	ш	ш	

	Degree	Classification
2017/01 - 2019/01 Attended	Postgraduate Certificate in Higher Education Teaching (Postgraduate Certificate)	
	Queen's University Belfast, United Kingdom	
2005/02/17 Concluded	Astronomy and Astrophysics (Doktor (PhD))	-
	Universiteit Leiden, Netherlands	
	"The shapes and spins of Kuiper Belt objects" (THESIS/DISSERTATION)	
2000 Concluded	Física (Licenciatura)	15
	Universidade de Lisboa Faculdade de Ciências, Portugal	
1997 Attended	Engenharia Electrotécnica e de Computadores (Mestrado)	aproveitamento em 20 cadeiras
	Universidade de Lisboa Instituto Superior Técnico, Portugal	

# **Affiliation**

Science		r caro bernaramo Edecida eraz
Science	Category Host institution/organization	Employer
2013 - 2016	Coordinating Researcher (Research) Max-Planck-Institut für Sonnensystemforschung, Germany	Max-Planck-Institut für Sonnensystemforschung, Germany
2011 - 2013	Contracted Researcher (Research) Queen's University Belfast, United Kingdom	Queen's University Belfast, United Kingdom
2009 - 2011	Principal Investigator (Research) Queen's University Belfast, United Kingdom	The Royal Society, United Kingdom
2006 - 2008	Postdoc (Research)	University of Hawai'i at Manoa Institute for Astronomy, United States
2005 - 2006	Postdoc (Research)	Universidade de Coimbra, Portugal
2000 - 2005	Contracted Researcher (Research) Universiteit Leiden, Netherlands	Universiteit Leiden, Netherlands
2002 - 2003	Visiting Researcher (Research)	Harvard-Smithsonian Center for Astrophysics, United States
1999 - 2000	Research Trainee (Research)	Instituto de Astrofísica e Ciências do Espaço, Portugal
Teaching in Highe	r Education	
	Category Host institution/organization	Employer
2016 - 2019	Lecturer (University Teacher)	Queen's University Belfast, United Kingdom
2003 - 2004	Assistant (University Teacher) Harvard University Department of Physics, United States	Harvard University Department of Physics, United States

# **Projects**

### **Grant**

	Designation	Funders
2018 - 2020	PATT Travel Grant for observational astrophysics at QUB: 2018 - 2020 ST/S001298/1	Science and Technology Facilities Council, United Kingdom
	Researcher	
	Queen's University Belfast, United Kingdom	
2017 - 2020	Queen's University Belfast Consolidated Grant in Solar Physics and Solar System Studies 2017 - 2020 ST/P000304/1	Science and Technology Facilities Council, United Kingdom
	Researcher	
	Queen's University Belfast, United Kingdom	
2016 - 2018	PATT Linked Grant for observational astrophysics at QUB: 2016 - 2018 ST/P001041/1	Science and Technology Facilities Council,
	Researcher	United Kingdom
	Queen's University Belfast, United Kingdom	
2013 - 2015	A laboratory and telescopic study of the colours of icy solar system objects	Leverhulme Trust, United Kingdom
	RPG-2013-389	
	Principal investigator	
	Queen's University Belfast, United Kingdom	
2009 - 2011	Extreme Objects in the Outer Solar System 7422	The Royal Society, United Kingdom
	Principal investigator	
	The Royal Society, United Kingdom	

### Other

	Designation	Funders
2013 - Current	Outer Solar System Origins Survey (OSSOS)	
	CFHT LP OSSOS	
	Researcher	

2009 - Current	TNOs are Cool: A Survey of the Transneptunian Region  KPOT_thmuelle_1
	Researcher
2014 - 2017	A Magnitude Limited Survey of the Rotational Properties of Kuiper Belt Objects 194.C-0207
	Principal investigator European Southern Observatory, Germany

### **Outputs**

Publications		
Book chapter	1	Pedro Lacerda; Jewitt, David; Moro-Martìn, Amaya; Lacerda, Pedro. "The Kuiper Belt and Other Debris Disks". In <i>Astrophysics in the Next Decade</i> . 2009.
		Published • 10.1007/978-1-4020-9457-6_3
	2	Sheppard, S. S.; Lacerda, P.; Ortiz, J. L "Photometric Lightcurves of Transneptunian Objects and Centaurs: Rotations, Shapes, and Densities". In <i>The Solar System Beyond Neptune</i> . 2008.  Published
Conference abstract	1	Robinson, James E.; Fraser, Wesley C.; Fitzsimmons, Alan; Lacerda, Pedro. "Investigating Gravitational Collapse of Pebble Clouds to form Trans-Neptunian Binaries". 2020.
	2	Kokotanekova, Rosita; Lacerda, Pedro; Snodgrass, Colin. "Optimal strategy for KBO lightcurve studies from the ground". 2019.

- Kokotanekova, Rosita; Snodgrass, Colin; Lacerda, Pedro; Green, Simon; Masoumzadeh, Nafiseh; Tubiana, Cecilia; Rizos, Juan Luis; et al. "Testing the surface evolution hypothesis of JFCs with ground photometric observations". 2019.
- Kokotanekova, Rosita; Snodgrass, Colin; Lacerda, Pedro; Green, Simon F.. "Evidence for a Surface Evolution Trend in Jupiter-Family Comets". 2018.
- 5 Pfalzner, Susanne; Bhandare, Asmita; Vincke, Kirsten; Lacerda, Pedro. "Did a stellar fly-by shape the outer solar system?". 2018.
- Kokotanekova, Rosita; Snodgrass, Colin; Lacerda, Pedro; Green, Simon F..

  "Physical properties of Jupiter-family comets and KBOs from ground-based lightcurve observations". 2017.

- 7 McNeill, Andrew; Fitzsimmons, Alan; Jedicke, Robert; Lilly, Eva; Lacerda, Pedro; Trilling, David E.; Members of the Pan-STARRS Science Consortium. "The search for extreme asteroids in the Pan-STARRS 1 Survey". 2017.
- Alexandersen, M.; Benecchi, S.; Chen, Y. -T.; Schwamb, M. E.; Wang, S. -Y.; Lehner, M.; Lacerda, P.; Thirouin, A.; Peixinho, N.. "Hyper Suprime-Cam Lightcurve Studies of Trans-Neptunian Objects from the Outer Solar System Origins Survey". 2017.
- 9 Kokotanekova, R.; Snodgrass, C.; Lacerda, P.; Lowry, S. C.; Fernández, Y. R.; Green, S. F.; Tubiana, C.; Fitzsimmons, A.; Hsieh, H. H.. "Evidence for low tensile strength in comet nuclei". 2017.
- Holman, Matthew J.; Chen, Ying-Tung; Lackner, Michael; Payne, Matthew John; Lin, Hsing-Wen; Cristopher Fraser, Wesley; Lacerda, Pedro; Pan-STARRS 1 Science Consortium. "Primary results from the Pan-STARRS-1 Outer Solar System Key Project". 2016.
- Paquette, J. A.; Altobelli, N.; Altwegg, K.; Briois, C.; Colangeli, L.; Cottin, H.; Baklouti, D.; et al. "COSIMA at Comet 67P/Churyumov-Gerasimenko After Perihelion". 2015.
- Bardyn, Anais; Hilchenbach, Martin; Briois, Christelle; Kissel, Jochen; Koch, Andreas; Langevin, Yves; Schulz, Rita; et al. "COSIMA In-situ dust particles measurements in the inner coma of comet 67P/Churyumov-Gerasimenko". 2015.
- Lorek, S.; Lacerda, P.; Gundlach, B.; Blum, J.. "Compaction of ice pebbles in collapsing pebble clouds and the dust-to-ice ratio of comets". 2015.
- 14 Kokotanekova, R.; Lacerda, P.; Snodgrass, C.; Lockhart, M.; Lorek, S.; Peixinho, N.; Thirouin, A.; et al. "A Magnitude Limited Survey of the Rotational Properties of Kuiper Belt Objects". 2015.
- Lacerda, P.; Ali-Lagoa, V.; Licandro, J.; Peixinho, N.. "A Survey for Extreme Shape Hilda Asteroids". 2015.
- Johansen, Anders; Mac Low, Mordecai-Mark; Lacerda, Pedro; Bizzarro, Martin. "Growth of Asteroids by Chondrule Accretion". 2015.
- Hilchenbach, M.; Langevin, Y.; Engrand, C.; Merouane, S.; Stenzel, O.; Kissel, J.; Briois, Ch.; et al. "In-Situ Cometary Particle Measurements in the Inner Coma of Comet 67P/Churyumov-Gerasimenko". 2015.
- Dumas, Christophe; Gourgeot, Florian; Carry, Benoit; Lacerda, Pedro; Merlin, Frederic; Vachier, Frederic; Antonieta Barucci, Maria; Berthier, Jerome. "Near-infrared spatially resolved spectroscopy of 136108 Haumea's multiple system". 2015.

- Muntean, Elena Andra; Field, Tom; Fitzsimmons, Alan; Hunniford, Adam; Lacerda, Pedro; McCullough, Bob. "Irradiation of oxygen and water ices at by 4 keV singly and doubly charged ions; sputtering and molecular synthesis". 2014.
- Santos-Sanz, P.; Lellouch, E.; Ortiz, J. L.; Kiss, Cs.; Müller, Th.; Vilenius, E.; Stansberry, J.; et al. "Thermal short-time variability of Kuiper Belt Objects observed with Herschel". 2014.
- Lin, H.; Chen, Y.; Lacerda, P.; Ip, W.; Holman, M. "Active Centaur P/2011 S1 (Gibbs)". 2013.
- Stansberry, John A.; Müller, T.; Lellouch, E.; Barucci, A.; Fornasier, S.; Kiss, C.; Lacerda, P.; et al. "TNOs are Cool! Summary Results from the Herschel Key Programme". 2013.
- Lacerda, Pedro. "An Unusually Shaped Haumea Family Member". 2013.
- Lacerda, P.; McNeill, A.. "An Unusually Shaped Haumea Family Member". 2013.
- Gourgeot, Florian; Dumas, C.; Carry, B.; Merlin, F.; Hestroffer, D.; Lacerda, P.. "Surface Heterogeneity of the dwarf-planet Haumea". 2012.
- Lellouch, Emmanuel; Santos-Sanz, P.; Mommert, M.; Fornasier, S.; Stansberry, J.; Müller, T.; Duffard, R.; et al. "Thermal Properties Of Trans-neptunian Objects And Centaurs From Combined Herschel And Spitzer Observations". 2012.
- Lacerda, Pedro; Jewitt, D.. "A Stellar Appulse by Exploding Comet 17P/Holmes". 2012.
- Santos-Sanz, Pablo; Lellouch, E.; Fornasier, S.; Kiss, C.; Müller, T. G.; Lacerda, P.; TNOs are Cool Team. "Dwarf planets observations with Herschel Space Observatory". 2010.
- Hsieh, Henry H.; Lacerda, P.. "176P/LINEAR: A Slow-Rotating, Highly Elongated Main-Belt Comet". 2010.
- Lacerda, Pedro. "The Near-Infrared Lightcurve of 2003 EL61". 2008.
- 31 Lacerda, Pedro. "Detection of Contact Binaries". 2007.
- Peixinho, Nuno; Lacerda, P.; Jewitt, D.: "Exploring The Color-inclination Correlation For Classical Tnos". 2007.

- 33 Lacerda, Pedro. "The Fraction of KBO Contact Binaries". 2007.
- Mann, Rita; Jewitt, D.; Lacerda, P.. "Fraction of Contact Binary Trojan Asteroids". 2006.
- Lacerda, Pedro; Jewitt, D.. "Densities from Lightcurves". 2006.
- Lacerda, P.. "Densities of solar system objects by lightcurve comparison with triaxial equilibrium ellipsoids". 2006.
- Lacerda, P.; Dominik, C.; Luu, J.; Kenyon, S.. "On the origin of KBO spins". 2005.
- Lacerda, Pedro; Luu, Jane. "Detectability of Lightcurves of Kbos". 2003.
- Peixinho, N.; Lacerda, P.; Roos-Serote, M.; Ortiz, J.; Doressoundiram, A.. "New Results on Centaurs 1997CU26 and 1999UG5". 2000.

#### Conference paper

- Peixinho, N.; Delsanti, A.; Guilbert-Lepoutre, A.; Gafeira, R.; Lacerda, P.. "Centaur-Sized KBOs Also Show Bimodal Colors". 2012.
- 2 Lacerda, P.. "The Unusual Comet P/2010 TO20 LINEAR-Grauer". 2012.
- Peixinho, N.; Delsanti, A.; Guilber-Lepoutre, A.; Gafeira, R.; Lacerda, P.. "The Kuiper Belt Color Controversy Returns". 2012.
- 4 Hsieh, H. H.; Yang, B.; Haghighipour, N.; Kaluna, H. M.; Fitzsimmons, A.; Denneau, L.; Novakovic, B.; et al. "Discovery of Main-Belt Comet P/2006 VW139 by Pan-STARRS1". 2012.
- 5 Lacerda, P.. "A Change in the Lightcurve of Contact Binary 2001 QG298". 2011.
- Dumas, C.; Carry, B.; Hestroffer, D.; Merlin, F.; Lacerda, P.; Gourgeot, F.. "High-contrast observations of the Haumea system". 2011.
- Santos-Sanz, P.; Kiss, C.; Lellouch, E.; Müller, T. G.; Stansberry, J.; Böhnhardt, H.; Lacerda, P.; et al. "Thermal lightcurve observations of TNOs with Herschel". 2011.

- 8 Lacerda, P.; Lellouch, E.; Kiss, C.; Müller, T. G.; Groussin, O.; Santos-Sanz, P.. "The thermal lightcurve of Kuiper belt object Haumea". 2010.
- 9 Mommert, Michael; Müller, G.; Bühnhardt, Hermann; Lellouch, Emmanuel; Stansberry, John; Barucci, Antonella; Crovisier, Jacques; et al. "TNOs are Cool: A Survey of the Trans-Neptunian Region: Radiometric properties of Trans-Neptunian Objects". 2010.
- 10 Lacerda, Pedro. "The Dark Red Spot on KBO Haumea". 2010.

10.1017/\$1743921310001730

lacerda, P.. "The Sizes of Kuiper Belt Objects". 2009.

10.1051/spica/200902004

- 12 Lacerda, P.. "The surface spot on KBO Haumea". 2009.
- 13 Lacerda, P.. "The Seasonal Activity of Main-Belt Comet 133P/Elst-Pizarro". 2009.
- Müller, Th. G.; Lellouch, E.; Böhnhardt, H.; Stansberry, J.; Barucci, A.; Crovisier, J.; Delsanti, A.; et al. "Herschel Open Time Key Programme—TNOs are Cool: A Survey of the Transneptunian Region". 2008.
- Peixinho, N.; Lacerda, P.; Jewitt, D.: "Classical Kuiper Belt: Modeling the Color-Inclination Trend". 2008.
- lacerda, P.; Jewitt, D.; Peixinho, N.: "A Dark, Red Spot on 2003 EL61". 2008.
- Stevenson, R.; Kleyna, J.; Lacerda, P.; Jewitt, D.. "Comet Holmes: Examining Four Months of Evolution Using Widefield Images". 2008.
- Müller, T. G.; Lellouch, E.; Böhnhardt, H.; Stansberry, J.; Barucci, A.; Crovisier, J.; Delsanti, A.; et al. "Hershel Open Time Key Programme: TNOs are Cool: A Survey of the Transneptunian Region". 2008.
- Lacerda, Pedro; Dominik, Carsten; Luu, Jane; Kenyon, Scott. "The Origin of the Spins of Kuiper Belt Objects". 2006.

10.1142/9789812773067\_0003

- Lacerda, Pedro; Luu, Jane. "On the detectability of lightcurves of Kuiper Belt objects". 2002.
- Peixinho, Nuno; Lacerda, Pedro; Ortiz, Jose-Luis; Doressoundiram, Alain; Roos-Serote, Maarten; Gutiérrez, Pedro J.. "Photometry of Centaurs 1997  $\rm CU_{26}$  and 1999  $\rm UG_5$ ". 2001.

10.1142/9789812811110\_0024

#### Journal article

J. E. Robinson; W. C. Fraser; A. Fitzsimmons; P. Lacerda. "Investigating gravitational collapse of a pebble cloud to form transneptunian binaries". Astronomy & Astrophysics 643 (2020): A55-A55. https://doi.org/10.1051%2F0004-6361%2F202037456.

10.1051/0004-6361/202037456

A. Farkas-Takács; Cs. Kiss; E. Vilenius; G. Marton; T. G. Müller; M. Mommert; J. Stansberry; et al. ""TNOs are Cool": A survey of the trans-Neptunian region". Astronomy & Astrophysics 638 (2020): A23-A23. https://doi.org/10.1051%2F0004-6361%2F201936183.

10.1051/0004-6361/201936183

Andrew McNeill; Alan Fitzsimmons; Robert Jedicke; Pedro Lacerda; Eva Lilly; Andrew Thompson; David E. Trilling; et al. "Extreme Asteroids in the Pan-STARRS 1 Survey". *The Astronomical Journal* (2018): https://doi.org/10.3847/1538-3881/aaeb8c.

10.3847/1538-3881/aaeb8c

- Kokotanekova, R.; Snodgrass, C.; Lacerda, P.; Green, S. F.; Nikolov, P.; Bonev, T.. "Implications of the small spin changes measured for large Jupiter-family comet nuclei". *Monthly Notices of the Royal Astronomical Society* (2018): 10.1093/mnras/sty1529
- Susanne Pfalzner; Asmita Bhandare; Kirsten Vincke; Pedro Lacerda. "Outer Solar System Possibly Shaped by a Stellar Fly-by". *The Astrophysical Journal* (2018): https://doi.org/10.3847/1538-4357/aad23c.

10.3847/1538-4357/aad23c

Reshetnyk, V. M.; Skorov, Yu. V.; Lacerda, P.; Hartogh, P.; Rezac, L.. "Dynamics of Dust Particles of Different Structure: Application to the Modeling of Dust Motion in the Vicinity of the Nucleus of Comet 67P/Churyumov-Gerasimenko". Solar System Research (2018):

10.1134/\$0038094618030085

Bannister, Michele T.; Gladman, Brett J.; Kavelaars, J. J.; Petit, Jean-Marc; Volk, Kathryn; Chen, Ying-Tung; Alexandersen, Mike; et al. "OSSOS. VII. 800+ Trans-Neptunian Objects—The Complete Data Release". *The Astrophysical Journal Supplement Series* (2018):

10.3847/1538-4365/aab77a

8 Lorek, S.; Lacerda, P.; Blum, J.. "Local growth of dust- and ice-mixed aggregates as cometary building blocks in the solar nebula". *Astronomy and Astrophysics* (2018):

10.1051/0004-6361/201630175

9 Matthew J. Holman; Matthew J. Payne; Wesley Fraser; Pedro Lacerda; Michele T. Bannister; Michael Lackner; Ying-Tung Chen; et al. "A Dwarf Planet Class Object in the 21:5 Resonance with Neptune". *The Astrophysical Journal* 855 1 (2018): L6-L6. https://doi.org/10.3847/2041-8213/aaadb3.

10.3847/2041-8213/aaadb3

Wesley C. Fraser; Petr Pravec; Alan Fitzsimmons; Pedro Lacerda; Michele T. Bannister; Colin Snodgrass; Igor Smolic. "The tumbling rotational state of 1l/ 'Oumuamua". *Nature Astronomy* 2 5 (2018): 383-386. https://doi.org/10.1038% 2Fs41550-018-0398-z.

10.1038/s41550-018-0398-z

Michele T. Bannister; Megan E. Schwamb; Wesley C. Fraser; Michael Marsset; Alan Fitzsimmons; Susan D. Benecchi; Pedro Lacerda; et al. "Col-OSSOS: Colors of the Interstellar Planetesimal II/'Oumuamua". *The Astrophysical Journal* 851 2 (2017): L38-L38. https://doi.org/10.3847/2041-8213/aaa07c.

Kokotanekova, R.; Snodgrass, C.; Lacerda, P.; Green, S. F.; Lowry, S. C.; Fernández, Y. R.; Tubiana, C.; Fitzsimmons, A.; Hsieh, H. H.. "Rotation of cometary nuclei: new light curves and an update of the ensemble properties of Jupiter-family comets". *Monthly Notices of the Royal Astronomical Society* (2017):

10.1093/mnras/stx1716

Santos-Sanz, P.; Lellouch, E.; Groussin, O.; Lacerda, P.; Müller, T. G.; Ortiz, J. L.; Kiss, C.; et al. ""TNOs are Cool": A survey of the trans-Neptunian region. XII. Thermal light curves of Haumea, 2003 VS<sub>2</sub> and 2003 AZ<sub>84</sub> with Herschel/PACS". (2017): https://ui.adsabs.harvard.edu/#abs/2017A&A...604A..95S.

10.1051/0004-6361/201630354

Snodgrass, C.; A'Hearn, M. F.; Aceituno, F.; Afanasiev, V.; Bagnulo, S.; Bauer, J.; Bergond, G.; et al. "The 67P/Churyumov-Gerasimenko observation campaign in support of the Rosetta mission". (2017): https://ui.adsabs.harvard.edu/#abs/2017RSPTA.37560249S.

10.1098/rsta.2016.0249

Fraser, Wesley C.; Bannister, Michele T.; Pike, Rosemary E.; Marsset, Michael; Schwamb, Megan E.; Kavelaars, J. J.; Lacerda, Pedro; et al. "All planetesimals born near the Kuiper belt formed as binaries". (2017): https://ui.adsabs.harvard.edu/#abs/2017NatAs...1E..88F.

10.1038/s41550-017-0088

Fraser, Wesley C.; Bannister, Michele T.; Pike, Rosemary E.; Marsset, Michael; Schwamb, Megan E.; Kavelaars, J. J.; Lacerda, Pedro; et al. "Corrigendum: All planetesimals born near the Kuiper belt formed as binaries". (2017): https://ui.adsabs.harvard.edu/#abs/2017NatAs...1E.138F.

10.1038/s41550-017-0138

Fitzsimmons, Alan; Snodgrass, Colin; Rozitis, Ben; Yang, Bin; Hyland, Méabh; Seccull, Tom; Bannister, Michele T.; et al. "Spectroscopy and thermal modelling of the first interstellar object 11/2017 U1 'Oumuamua". (2017): http://dx.doi.org/10. 1038/s41550-017-0361-4.

10.1038/s41550-017-0361-4

Bannister, Michele T.; Alexandersen, Mike; Benecchi, Susan D.; Chen, Ying-Tung; Delsanti, Audrey; Fraser, Wesley C.; Gladman, Brett J.; et al. "OSSOS. IV. Discovery of a Dwarf Planet Candidate in the 9:2 Resonance with Neptune". (2016): https://ui.adsabs.harvard.edu/#abs/2016AJ....152..212B.

10.3847/0004-6256/152/6/212

Muntean, Elena A.; Lacerda, Pedro; Field, Thomas A.; Fitzsimmons, Alan; Fraser, Wesley C.; Hunniford, Adam C.; McCullough, Robert W.. "A laboratory study of water ice erosion by low-energy ions". (2016): https://ui.adsabs.harvard.edu/#abs/2016MNRAS.462.3361M.

10.1093/mnras/stw1855

Hsing Wen Lin (¿¿¿); Ying-Tung Chen (¿¿¿); Matthew J. Holman; Wing-Huen Ip (¿¿¿); M. J. Payne; P. Lacerda; W. C. Fraser; et al. "THE PAN-STARRS 1 DISCOVERIES OF FIVE NEW NEPTUNE TROJANS". *The Astronomical Journal* (2016):

10.3847/0004-6256/152/5/147

Chen, Ying-Tung; Lin, Hsing-Wen; Holman, Matthew J.; Payne, Matthew John; Fraser, Wesley Cristopher; Lacerda, Pedro; Ip, Wing-Huen; Pan-STARRS 1 Builders. "Discovery of A New Retrograde Trans-Neptunian Object: Hint of A Common Orbital Plane for Low Semi-Major Axis, High Inclination TNOs and

Centaurs". (2016): https://ui.adsabs.harvard.edu/#abs/2016DPS....4811304C.

- Kokotanekova, Rosita; Snodgrass, Colin; Lacerda, Pedro; Green, Simon F..
  "Rotation Rates and Spin Changes of Jupiter Family Comet Nuclei: New optical lightcurves and an update on the population properties.". (2016): https://ui.adsabs.harvard.edu/#abs/2016DPS....4821904K.
- Lorek, Sebastian; Lacerda, Pedro; Blum, Jürgen. "Comet Formation in Collapsing Pebble Clouds: Pebble Formation". (2016): https://ui.adsabs.harvard.edu/#abs/2016DPS....4833107L.
- Skorov, Yuri; Reshetnyk, Volodymyr; Lacerda, Pedro; Hartogh, Paul; Blum, Jürgen. "Acceleration of cometary dust near the nucleus: application to 67P/Churyumov-Gerasimenko". (2016): https://ui.adsabs.harvard. edu/#abs/2016MNRAS.461.3410S.

10.1093/mnras/stw1470

Bannister, Michele T.; Kavelaars, J. J.; Petit, Jean-Marc; Gladman, Brett J.; Gwyn, Stephen D. J.; Chen, Ying-Tung; Volk, Kathryn; et al. "The Outer Solar System Origins Survey. I. Design and First-quarter Discoveries". (2016): https://ui.adsabs. harvard.edu/#abs/2016AJ....152...70B.

10.3847/0004-6256/152/3/70

Gourgeot, F.; Carry, B.; Dumas, C.; Vachier, F.; Merlin, F.; Lacerda, P.; Barucci, M. A.; Berthier, J.. "Near-infrared spatially resolved spectroscopy of (136108) Haumea's multiple system". (2016): https://ui.adsabs.harvard.edu/#abs/2016A&A...593A..19G.

10.1051/0004-6361/201526423

Chen, Ying-Tung; Lin, Hsing Wen; Holman, Matthew J.; Payne, Matthew J.; Fraser, Wesley C.; Lacerda, Pedro; Ip, Wing-Huen; et al. "Discovery of a New Retrograde Trans-Neptunian Object: Hint of a Common Orbital Plane for Low Semimajor Axis, High-inclination TNOs and Centaurs". (2016): https://ui.adsabs. harvard.edu/#abs/2016ApJ...827L..24C.

10.3847/2041-8205/827/2/L24

Lorek, S.; Gundlach, B.; Lacerda, P.; Blum, J.. "Comet formation in collapsing pebble clouds. What cometary bulk density implies for the cloud mass and dust-to-ice ratio". (2016): https://ui.adsabs.harvard.edu/#abs/2016A&A...587A. 128L.

10.1051/0004-6361/201526565

Muntean, E. A.; Lacerda, P.; Field, T. A.; Fitzsimmons, A.; Hunniford, C. A.; McCullough, R. W.. "Sputtering of oxygen ice by low energy ions". (2015): https://ui.adsabs.harvard.edu/#abs/2015SurSc.641..204M.

10.1016/j.susc.2015.07.005

Pfalzner, S.; Davies, M. B.; Gounelle, M.; Johansen, A.; Münker, C.; Lacerda, P.; Portegies Zwart, S.; et al. "The formation of the solar system". (2015): https://ui.adsabs.harvard.edu/#abs/2015PhyS...90f8001P.

10.1088/0031-8949/90/6/068001

Johansen, Anders; Mac Low, Mordecai-Mark; Lacerda, Pedro; Bizzarro, Martin. "Growth of asteroids, planetary embryos, and Kuiper belt objects by chondrule accretion". *Science Advances* (2015):

10.1126/sciadv.1500109

Hsieh, Henry H.; Hainaut, Olivier; Novakovic, Bojan; Bolin, Bryce; Denneau, Larry; Fitzsimmons, Alan; Haghighipour, Nader; et al. "Sublimation-Driven Activity in Main-Belt Comet 313p/Gibbs". (2015): https://ui.adsabs.harvard.edu/#abs/2015ApJ...800L..16H.

10.1088/2041-8205/800/1/L16

Lacerda, Pedro; Fornasier, Sonia; Lellouch, Emmanuel; Kiss, Csaba; Vilenius, Esa; Santos-Sanz, Pablo; Rengel, Miriam; et al. "The Albedo-Color Diversity of Transneptunian Objects". (2014): https://ui.adsabs.harvard.edu/#abs/2014ApJ... 793L...2L.

10.1088/2041-8205/793/1/L2

Lin, H. W.; Chen, Y. T.; Lacerda, P.; Ip, W. H.; Holman, M.; Protopapas, P.; Chen, W. P.; et al. "Pan-STARRS 1 Observations of the Unusual Active Centaur P/2011 S1 (Gibbs)". (2014): https://ui.adsabs.harvard.edu/#abs/2014AJ....147..114L. 10.1088/0004-6256/147/5/114

Hsieh, Henry H.; Denneau, Larry; Fitzsimmons, Alan; Hainaut, Olivier R.; Ishiguro, Masateru; Jedicke, Robert; Kaluna, Heather M.; et al. "Search for the Return of Activity in Active Asteroid 176P/LINEAR". (2014): https://ui.adsabs.harvard.edu/#abs/2014AJ....147...89H.

10.1088/0004-6256/147/4/89

Lacerda, Pedro; McNeill, Andrew; Peixinho, Nuno. "The unusual Kuiper belt object 2003 SQ<sub>317</sub>". (2014): https://ui.adsabs.harvard.edu/#abs/2014MNRAS. 437.3824L.

10.1093/mnras/stt2180

- de Jong, J. T. A.; Kuijken, K.; Applegate, D.; Begeman, K.; Belikov, A.; Blake, C.; Bout, J.; et al. "The Kilo-Degree Survey". *The Messenger* (2013):
- Lellouch, E.; Santos-Sanz, P.; Lacerda, P.; Mommert, M.; Duffard, R.; Ortiz, J. L.; Müller, T. G.; et al. ""TNOs are Cool": A survey of the trans-Neptunian region. IX. Thermal properties of Kuiper belt objects and Centaurs from combined Herschel and Spitzer observations". (2013): https://ui.adsabs.harvard.edu/#abs/2013A&A...557A..60L.

10.1051/0004-6361/201322047

Fornasier, S.; Lellouch, E.; Müller, T.; Santos-Sanz, P.; Panuzzo, P.; Kiss, C.; Lim, T.; et al. "TNOs are Cool: A survey of the trans-Neptunian region. VIII. Combined Herschel PACS and SPIRE observations of nine bright targets at 70-500 μm". (2013): https://ui.adsabs.harvard.edu/#abs/2013A&A...555A..15F.

10.1051/0004-6361/201321329

Lacerda, Pedro. "Comet P/2010 TO20 LINEAR-Grauer as a Mini-29P/SW1". (2013): https://ui.adsabs.harvard.edu/#abs/2013MNRAS.428.1818L.

10.1093/mnras/sts164

Lacerda, Pedro; Jewitt, David. "Extinction in the Coma of Comet 17P/Holmes". (2012): https://ui.adsabs.harvard.edu/#abs/2012ApJ...760L...2L.

10.1088/2041-8205/760/1/L2

Hsieh, H.H.; Yang, B.; Haghighipour, N.; Kaluna, H.M.; Fitzsimmons, A.; Denneau, L.; Novakovic, B.; et al. "Discovery of main-belt comet P/2006 VW 139 by Pan-STARRS1". *Astrophysical Journal Letters* 748 1 (2012): http://www.scopus.com/inward/record.url?eid=2-s2.0-84863233989&partnerID=MN8TOARS.

10.1088/2041-8205/748/1/L15

Carry, B.; Snodgrass, C.; Lacerda, P.; Hainaut, O.; Dumas, C.: "Characterisation of candidate members of (136108) Haumea's family". *Astronomy and Astrophysics* 544 (2012): http://www.scopus.com/inward/record.url?eid=2-s2.0-84865250839&partnerID=MN8TOARS.

10.1051/0004-6361/201219044

Peixinho, N.; Delsanti, A.; Guilbert-Lepoutre, A.; Gafeira, R.; Lacerda, P.. "The bimodal colors of Centaurs and small Kuiper belt objects". *Astronomy and Astrophysics* 546 (2012): http://www.scopus.com/inward/record.url?eid=2-s2.0-84867256108&partnerID=MN8TOARS.

10.1051/0004-6361/201219057

Hsieh, H.H.; Yang, B.; Haghighipour, N.; Novakovic, B.; Jedicke, R.; Wainscoat, R. J.; Denneau, L.; et al. "Observational and dynamical characterization of mainbelt COMET P/2010 R2 (La Sagra)". *Astronomical Journal* 143 5 (2012): http://www.scopus.com/inward/record.url?eid=2-s2.0-84858960163&partnerID=MN8TOARS.

10.1088/0004-6256/143/5/104

Lacerda, P.. "A change in the light curve of Kuiper Belt contact binary (139775) 2001 QG 298". *Astronomical Journal* 142 3 (2011): http://www.scopus.com/inward/record.url?eid=2-s2.0-80052717211&partnerID=MN8TOARS. 10.1088/0004-6256/142/3/90

Hsieh, H.H.; Ishiguro, M.; Lacerda, P.; Jewitt, D.. "Physical properties of main-belt comet 176P/LINEAR". *Astronomical Journal* 142 1 (2011): http://www.scopus.com/inward/record.url?eid=2-s2.0-79959927041&partnerID=MN8TOARS.

Carry, B.; Hestroffer, D.; Demeo, F.E.; Thirouin, A.; Berthier, J.; Lacerda, P.; Sicardy, B.; et al. "Integral-field spectroscopy of (90482) Orcus-Vanth". *Astronomy and Astrophysics* 534 (2011): http://www.scopus.com/inward/record.url?eid=2-s2.0-80054753971&partnerID=MN8TOARS.

10.1051/0004-6361/201117486

Müller, T.G.; Lellouch, E.; Stansberry, J.; Kiss, C.; Santos-Sanz, P.; Vilenius, E.; Protopapa, S.; et al. ""TNOs are Cool": A survey of the trans-Neptunian region: I. Results from the Herschel science demonstration phase (SDP)". *Astronomy and Astrophysics* 518 2 (2010): http://www.scopus.com/inward/record.url?eid=2-s2.0-77954788894&partnerID=MN8TOARS.

10.1051/0004-6361/201014683

Lellouch, E.; Kiss, C.; Santos-Sanz, P.; Müller, T.G.; Fornasier, S.; Groussin, O.; Lacerda, P.; et al. ""TNOs are cool": A survey of the trans-Neptunian region II. The thermal lightcurve of (136108) Haumea". *Astronomy and Astrophysics* 518 3 (2010): http://www.scopus.com/inward/record.url?eid=2-s2.0-77954764541&partnerID=MN8TOARS.

10.1051/0004-6361/201014648

- Lim, T.L.; Stansberry, J.; Müller, T.G.; Mueller, M.; Lellouch, E.; Kiss, C.; Santos-Sanz, P.; et al. ""tNOs are Cool": A survey of the trans-Neptunian region". *Astronomy and Astrophysics* 518 7-8 (2010): http://www.scopus.com/inward/record.url? eid=2-s2.0-77957825423&partnerID=MN8TOARS.
- Lim, T.L.; Stansberry, J.; Müller, T.G.; Mueller, M.; Lellouch, E.; Kiss, C.; Santos-Sanz, P.; et al. ""TNOs are Cool": A survey of the trans-Neptunian region". *Astronomy and Astrophysics* 518 2 (2010): http://www.scopus.com/inward/record.url?eid=2-s2.0-77954805627&partnerID=MN8TOARS.

10.1051/0004-6361/201014701

- Johansen, A.; Lacerda, P.. "Prograde rotation of protoplanets by accretion of pebbles in a gaseous environment". *Monthly Notices of the Royal Astronomical Society* 404 1 (2010): 475-485. http://www.scopus.com/inward/record.url?eid=2-s2.0-77954373838&partnerID=MN8TOARS.
  - 10.1111/j.1365-2966.2010.16309.x
- Hsieh, H.H.; Jewitt, D.; Lacerda, P.; Lowry, S.C.; Snodgrass, C.. "The return of activity in main-belt comet 133P/Elst-Pizarro". *Monthly Notices of the Royal Astronomical Society* 403 1 (2010): 363-377. http://www.scopus.com/inward/record.url?eid=2-s2.0-77954358675&partnerID=MN8TOARS. 10.1111/j.1365-2966.2009.16120.x
- Lacerda, P.. "Time-resolved near-infrared photometry of extreme kuiper belt object Haumea". *Astronomical Journal* 137 2 (2009): 3404-3413. http://www.scopus.com/inward/record.url?eid=2-s2.0-66249111823&partnerID=MN8TOARS. 10.1088/0004-6256/137/2/3404
- Müller, T.G.; Lellouch, E.; Böhnhardt, H.; Stansberry, J.; Barucci, A.; Crovisier, J.; Delsanti, A.; et al. "TNOs are cool: A survey of the transneptunian region". *Earth, Moon and Planets* 105 2-4 (2009): 209-219. http://www.scopus.com/inward/record.url?eid=2-s2.0-69249231103&partnerID=MN8TOARS. 10.1007/s11038-009-9307-x
- 57 Lacerda, Pedro. "The Dark Red Spot on KBO Haumea". (2009): http://dx.doi. org/10.1017/s1743921310001730.
   10.1017/s1743921310001730
- Lacerda, P.. "Detection of contact binaries using sparse high phase angle light curves". *Astrophysical Journal Letters* 672 1 PART 2 (2008): http://www.scopus.com/inward/record.url?eid=2-s2.0-67649566139&partnerID=MN8TOARS.
- Lacerda, P.; Jewitt, D.; Peixinho, N.: "Erratum: High-precision photometry of extreme KBO 2003 EL61: (The Astronomical Journal (2008) 135 (1749))". Astronomical Journal 136 4 (2008): 1754-1756. http://www.scopus.com/inward/record.url?eid=2-s2.0-56449105281&partnerID=MN8TOARS. 10.1088/0004-6256/136/4/1754
- Peixinho, N.; Lacerda, P.; Jewitt, D.. "Color-inclination relation of the classical Kuiper belt objects". *Astronomical Journal* 136 5 (2008): 1837-1845. http://www.scopus.com/inward/record.url?eid=2-s2.0-56449093056&partnerID=MN8TOARS.
  - 10.1088/0004-6256/136/5/1837
- Lacerda, P.; Jewitt, D.; Peixinho, N.. "High-precision photometry of extreme kbo 2003 EL61". *Astronomical Journal* 135 5 (2008): 1749-1756. http://www.scopus.com/inward/record.url?eid=2-s2.0-50849121727&partnerID=MN8TOARS. 10.1088/0004-6256/135/5/1749
- Mann, R.K.; Jewitt, D.; Lacerda, P.. "Fraction of contact binary Trojan asteroids". Astronomical Journal 134 3 (2007): 1133-1144. http://www.scopus.com/inward/record.url?eid=2-s2.0-34548607540&partnerID=MN8TOARS. 10.1086/520328
- Lacerda, P.; Jewitt, D.C.. "Densities of solar system objects from their rotational light curves". *Astronomical Journal* 133 4 (2007): 1393-1408. http://www.scopus.com/inward/record.url?eid=2-s2.0-34247529058&partnerID=MN8TOARS. 10.1086/511772

- Lacerda, P.; Luu, J.. "Analysis of the rotational properties of kuiper belt objects". Astronomical Journal 131 4 (2006): 2314-2326. http://www.scopus.com/inward/record.url?eid=2-s2.0-33744479702&partnerID=MN8TOARS. 10.1086/501047
- Lacerda, Pedro. "The Shapes and Spins of Kuiper Belt Objects". (2005): https://ui.adsabs.harvard.edu/#abs/2005PhDT.......21L.
- Rousselot, P.; Petit, J. -M.; Poulet, F.; Lacerda, P.; Ortiz, J. "Photometry of the Kuiper-Belt object 1999 TD<sub>10</sub> at different phase angles". (2003): https://ui.adsabs. harvard.edu/#abs/2003A&A...407.1139R.

10.1051/0004-6361:20030850

- 67 Lacerda, P.. "On the detectability of light curves of Kuiper Belt objects". (2003): https://ui.adsabs.harvard.edu/#abs/2003JAD.....9R...8L.
- 68 Luu, J.; Lacerda, P.. "The shape distribution of Kuiper Belt objects". *Earth, Moon and Planets* 92 1-4 (2003): 221-232. http://www.scopus.com/inward/record.url? eid=2-s2.0-3242803519&partnerID=MN8TOARS.

10.1023/B:MOON.0000031942.35907.c6

Lacerda, P.; Luu, J.. "On the detectability of lightcurves of Kuiper belt objects". *Icarus* 161 1 (2003): 174-180. http://www.scopus.com/inward/record.url?eid=2-s2. 0-0037220768&partnerID=MN8TOARS.

10.1016/S0019-1035(02)00019-2

- Rousselot, P.; Petit, J.-M.; Poulet, F.; Lacerda, P.; Ortiz, J.. "Photometry of the Kuiper-Belt object 1999 TD 10 at different phase angles". *Astronomy and Astrophysics* 407 3 (2003): 1139-1147. http://www.scopus.com/inward/record.url? eid=2-s2.0-0041429629&partnerID=MN8TOARS.
- Lacerda, P.; Luu, J.. "On the detectability of lightcurves of Kuiper Belt objects". *European Space Agency, (Special Publication) ESA SP* 500 (2002): 51-54. http://www.scopus.com/inward/record.url?eid=2-s2.0-0036664530&partnerID=MN8TOARS.
- Peixinho, N.; Lacerda, P.; Ortiz, J. L.; Doressoundiram, A.; Roos-Serote, M.; Gutiérrez, P. J.. "Photometric study of Centaurs 10199 Chariklo (1997 CU<sub>26</sub>) and 1999 UG<sub>5</sub>". *Astronomy and Astrophysics* (2001): 10.1051/0004-6361:20010382
- Peixinho, N.; Lacerda, P.; Ortiz, J.L.; Doressoundiram, A.; Roos-Serote, M.; Gutiérrez, P.J.. "Photometric study of Centaurs 10199 Chariklo (1997 CU26) and 1999 UG5". *Astronomy and Astrophysics* 371 2 (2001): 753-759. http://www.scopus.com/inward/record.url?eid=2-s2.0-0035325370&partnerID=MN8TOARS.

Newspaper article

Pedro Lacerda. ""Toda a gente percebia que este não era um dia qualquer"", Público, 2014, https://www.publico.pt/2014/11/13/ciencia/cronica/toda-a-gente-percebia-que-este-nao-era-um-dia-qualquer-1676153.

#### Other

#### Other output

- 2010 JO179. 2017. Bannister, M. T.; Fraser, W. C.; Lacerda, P.; Patej, A.; Blum, R.; Nord, B.; Myers, A.; et al.
- 2 2012 DB99. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 3 2012 DA99. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 4 2012 FK84. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 5 2012 EE18. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 6 2012 HL85. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 7 2012 HK85. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 8 2012 KW51. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 9 2012 JH67. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2012 TD324. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 2012 SB67. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2012 TF324. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 2012 TE324. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 2012 UC178. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2012 UB178. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.

- 2012 UE178. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 17 2012 UD178. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2011 UJ413. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2011 UH413. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 20 2011 VJ24. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2011 UK413. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 22 2011 XJ4. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 23 2011 WJ157. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 2011 YN79. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 25 2012 BW154. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 26 2012 BV154. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 27 2012 BY154. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 28 2012 BX154. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 29 2012 BA155. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 2012 BZ154. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.

- 2012 DZ98. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 32 2012 CS57. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 2010 VV224. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2010 TK192. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 35 2010 VX224. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2010 VW224. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 37 2011 BR163. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 38 2010 XE91. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 2011 BT163. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 40 2011 BS163. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 41 2011 BV163. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 42 2011 BU163. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 43 2011 CX119. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2011 CW119. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 45 2011 LZ28. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.

- 46 2011 CY119. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 47 2011 OB60. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 48 2011 OA60. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 49 2010 MQ116. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 50 2010 LB136. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 51 2010 OO127. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 52 2010 MR116. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 53 2010 RD188. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 54 2010 PP81. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 55 2010 RF188. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 56 2010 RE188. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 57 2010 TA192. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 58 2010 SS43. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 59 2010 TD192. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 60 2010 TB192. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.

- 2014 HT199. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 62 2014 GM54. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 63 2010 TF192. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2014 WT69. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 65 2010 TE192. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2014 LT28. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 67 2010 TH192. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 68 2014 WD510. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 69 2010 TG192. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 70 2014 WP509. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 71 2015 AM281. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 72 2001 DC106. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 73 2006 TP130 = 2010 TK182. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 74 2006 TO130. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 75 2003 UJ292. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.

- 76 2010 TJ182. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 77 2010 EQ65. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2010 TM182. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 79 2010 TL182. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2010 DN93. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 81 2010 TN182. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2013 NM24. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2013 LY35. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2013 PX74. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2013 PW74. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 2013 TM159. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 2013 QQ95. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2014 DT143. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 89 2013 XD26. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2014 DU143. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.

- 91 2013 AR183. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 92 2013 AQ183. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 93 2013 AT183. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 94 2013 AS183. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2013 CD223. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 96 2013 BN82. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 97 2013 EH154. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 98 2013 CE223. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 99 2013 FR28. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2013 EJ154. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2013 HW156. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 102 2013 GJ138. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 2013 HY156. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.
- 104 2013 HX156. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- 105 2013 JW65. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y. -T.; Fraser, W.; et al.

- 2013 HZ156. 2016. Gibson, B.; Goggia, T.; Primak, N.; Schultz, A.; Willman, M.; Chen, Y.-T.; Fraser, W.; et al.
- Observations and Orbits of Comets. 2013. Kostov, A.; Enikova, P.; Cernis, K.; Giambersio, A. M.; Foglia, S.; Galli, G.; Buzzi, L.; et al.
- 108 Comet C/2012 S1 (Ison). 2013. Fitzsimmons, A.; Lacerda, P.; Lowry, S.; Jones, G.; Ramanjooloo, Y.; Marchant, J..
- Minor Planet Observations [F65 Haleakala-Faulkes Telescope North]. 2011. Bedient, J.; Tholen, D. J.; Micheli, M.; Guido, E.; Lister, T.; Howes, N.; Blyth, H.; et al.
- Minor Planet Observations [F65 Haleakala-Faulkes Telescope North]. 2010. Fitzsimmons, A.; Asher, D. J.; Miles, R.; Roche, P.; Micheli, M.; Sergison, D.; Hsieh, H.; et al.
- Comet 133P/Elst-Pizarro. 2007. Jewitt, D.; Lacerda, P.; Peixinho, N..

### **Activities**

## **Oral presentation**

	Presentation title	Event name Host (Event location)
2015/11/14	O novo Sistema Solar	2.ª Conferência de Professores EspAciais - ESERO PT
		Ciência Viva / Pavilhão do Conhecimento / ESERO (Lisbon, Portugal)
2015/11/13	Encontro com um Cientista	Encontro com um Cientista
		Pavilhão do Conhecimento (Lisbon, Portugal)
2015/05/21	Planet and Comet Formation	Class for High School Students
		Colégio Salesianos de Lisboa (Lisbon, Portugal)
2014/11/12	From Comets to Planets	Philae landing on comet 67P
		Ciência Viva/Pavilhão do Conhecimento (Lisbon, Portugal)
2013/06/22	The impact of philanthropy on my career and research	Queen's University Belfast Benefactors Lunch
		Queen's University Belfast (Belfast,

		United Kingdom)
2013/05/07	Today's Astrophysics, Tomorrow's Discoveries	Café Scientifique - Science Cafe
		Belfast Science Café (Belfast, United Kingdom)
Supervision		
	Thesis Title Role	Degree Subject (Type) Institution / Organization
2017 - 2020	The origin and evolution of	Astrophysics (PhD)
	Transneptunian binaries Co-supervisor of James Robinson	Queen's University Belfast, United Kingdom
2014 - 2018	Bulk Properties and Evolution of	(PhD)
	Jupiter-Family Comet Nuclei  Co-supervisor of Rosita Kokotanekova	Max-Planck-Institut für
	Co-supervisor of Rosita Kokotaniekova	Sonnensystemforschung, Germany
2014 - 2017	Comet Formation in the Framework of	(PhD)
	Streaming Instability	Max-Planck-Institut für
	Co-supervisor of Sebastian Lorek	Sonnensystemforschung, Germany

# **Event organisation**

	Event name Type of event (Role)	Institution / Organization
2018/06/22 - 2018/06/23	Before and After Halley explores, for the first time, how medieval records of comets can be used to test the theory that our solar system may include an additional, undiscovered planet: Planet Nine. Combining the skills of a medievalist and an astronomer, this exhibit challenges the assumption that early medieval scientific thought was simple and undeserving of serious scientific investigation. (2018/06/22 - 2018/06/23)	
	Festival (Co-organisor)	
2018/05/02 - 2018/06/03	Marvelling at the Skies: Comets through the Eyes of the Anglo-Saxons. This exhibition combines records of comets from Anglo-Saxon sources with images from NASA, Armagh Observatory & AAANI. A cosmic journey from a description of a comet in England in the year 891 under the period of Alfred the Great, to the sighting of a hazy greenhued comet Lovejoy in 2013. This exhibition is part of the Royal Society APEX project 'Before and After Halley:	Ulster Museum, United Kingdom

Medieval Visions of Modern Science'
funded by the UK leading academies
and the Leverhulme Trust. (2018/05/02 -
2018/06/03)

Exhibition (Co-organisor)

### 2016/07/04 -2016/07/10

The comet revealed: Rosetta and Philae at Comet 67P. Rosetta has revealed Comet 67P to be a bizarre chunk of dusty ice, with a fascinating landscape of towering cliffs and smooth plains, from which jets of gas and dust erupt into space. The comet is a natural laboratory for a wealth of chemical and physical processes, detected by the orbiter and lander. By combining this data with images and spectra observed from Earth, we're glimpsing the Solar System's early history. (2016/07/04 - 2016/07/10)

The Royal Society, United Kingdom

Exhibition (Co-organisor)

Exhibition (Co-organisor)

### 2013/07/02 -2013/07/07

Ice Worlds - Royal Society Summer Science Exhibition. Exhibit about the moons of the outer planets and other large icy bodies in our solar system, many of which have atmospheres. volcanoes that erupt water, and underground oceans. We helped the public understand the gravity, orbits, compositions and atmospheres of these icy worlds, and how their surfaces are altered by being exposed to radiation. We highlighted future space missions that may determine whether it's possible for humans to inhabit some mysterious icy world one day. (2013/07/02 - 2013/07/07)

The Royal Society, United Kingdom

#### 2012/10/17 - 2012/10/17

Michael West Lecture: "The Sun". Dr Lucie Green is a space scientist who studies the Sun. She was a Royal Society Dorothy Hodgkin Research Fellow and I now holds a Leverhulme Fellowship. Dr Green also works in TV (you may have seen her in The Sky At Night) and radio, writes science articles and give talks about the UK's current research in solar system science. She was the 2009 recipient of the Kohn Award for excellence in public engagement with science. (2012/10/17 - 2012/10/17) Queen's University Belfast, United Kingdom

Seminar (President of the Organising Committee)

2012/05/02	-
2012/05/02	

Michael West Lecture: "What if the speed of light isn't constant? What you gain and what you lose." João Magueijo has defied one of the tenets of modern physics, that the speed of light is constant. His research in cosmology lies at the very frontier of our understanding of how the Universe was born and evolves. Magueijo has held the prestigious St. John's College (Cambridge) and Royal Society research fellowships, and was visiting researcher at the UC Berkeley and Princeton. He is Reader in Theoretical Physics at Imperial College London. (2012/05/02 -2012/05/02)

Seminar (President of the Organising

Committee)

Committee)

Committee)

Queen's University Belfast, United Kingdom

#### 2011/08/03 - 2011/08/03

Michael West Lecture: Killer Asteroids. Dr Robert Jedicke has had four professional careers: Canadian football player, particle physicist, software engineer and astronomer. At the University of Hawaii he leads the PanSTARRS team searching for asteroids and comets. In three years, PanSTARRS will discover more solar system objects than have been found in the past two centuries. A renowned asteroid hunter, Jedicke is leading the search for dangerous asteroids that may impact the Earth in the future. (2011/08/03 - 2011/08/03)

Seminar (President of the Organising

Queen's University Belfast, United Kingdom

#### 2011/07/22 - 2011/07/22

Michael West Lecture on "Supermassive Black Holes". Prof Reinhard Genzel, director of the Max Planck Institute for Extraterrestrial Physics & Professor at the UC Berkeley was the recipient of the 2007 Albert Einstein Medal.

Over the past two decades, compelling evidence has been obtained for the existence of black holes with masses millions of times that of our Sun. In 2008, Reinhard Genzel won the prestigious Shaw Prize for establishing the existence of such a supermassive black hole in the centre of our own Milky Way. (2011/07/22 - 2011/07/22)

Seminar (President of the Organising

Queen's University Belfast, United Kingdom

## Jury of academic degree

	Theme Role	Candidate name (Type of degree) Institution / Organization
2014/12/11	Formation of pebble-pile planetesimals: understanding the interior structure of comets. The thesis studies the collapse of a self- gravitating cloud of pebbles to form planetesimals. The self-gravitating cloud contracts when it loses energy in inelastic collisions between pebbles leading to a higher density. Because of the negative heat capacity of the system the relative speeds of the pebbles increase when the cloud loses energy. Higher density and collision speeds results in higher collision rates, faster energy dissipation and run-away collapse.  (Thesis) Arguer	Karl Wahlberg Jansson (Other) Lunds Universitet, Sweden

# **Course / Discipline taught**

	Academic session	Degree Subject (Type)	Institution / Organization
2018/09 - 2019/09	Computational Modelling in Physics	Physics MSci (Master)	Queen's University Belfast, United Kingdom
2016/09 - 2019/09	Mathematics for Scientists and Engineers	Physics MSci (Master)	Queen's University Belfast, United Kingdom
2016/09 - 2019/09	Scientific Skills	Physics MSci (Master)	Queen's University Belfast, United Kingdom
2016/09 - 2019/09	Foundation Physics	Physics MSci (Master)	Queen's University Belfast, United Kingdom
2015/04 - 2015/07	Solar System Science: The Planetary System. It gives an introduction to this Solar System Science at the graduate level and is mandatory for all first-year IMPRS PhD students.	Solar System Science: The Planetary System (Doktor (PhD))	Max-Planck-Institut für Sonnensystemforsch ung, Germany
2012 - 2012	STEPS (Sci/Tech Experts in Primary Schools) Class on the Solar System at Primary School, Dunmurry, Northern Ireland	Our Solar System	Christ the Redeemer Primary School, United Kingdom
2005 - 2005	Solar System Teacher at the BEST Summer School	Solar System (Outros)	Board of European Students of Technology, Portugal

Astronomy 101

(Bachelor)

Harvard University Department of Physics, United States

## **Evaluation committee**

	Activity description Role	Institution / Organization	Funding entity
2019 - 2019	NASA Discovery Mission (space exploration) Scientific Evaluation Panel	NASA Science Mission Directorate, United States	
	Specialist		
2015 - 2015	NASA Discovery Mission (space exploration) Scientific Evaluation Panel Specialist	NASA Science Mission Directorate, United States	
2011 - 2011	NASA Discovery Mission (space exploration) Scientific Evaluation Panel Specialist	NASA Science Mission Directorate, United States	
2007 - 2007	NASA ROSES Grants Program Specialist	NASA Science Mission Directorate, United States	

# Interview (newspaper / magazine)

	Activity description	Newspaper / Forum
2016/09/30	Final da missão Rosetta. "Foi a primeira vez que vimos um cometa tão perto, que o seguimos durante uma boa parte da órbita, que vimos como muda quando se aproxima do Sol, que aterrámos um zingarelho na sua superfície", destaca o astrofísico Pedro Lacerda que estuda os dados da Rosetta, em conjunto com o seu aluno de doutoramento, Sebastian Lorek, que trabalha no Instituto Max Planck para Investigação do Sistema Solar, em Göttingen. Até há bem pouco tempo, diz o investigador, isto eram "coisas de sonho".	Diário de Notícias
2016/07/11	Astronomers discover distant dwarf planet beyond Neptune. Currently designated 2015 RR245, the giant ball of ice and rock lies nine billion kilometres away in the the most distant reaches of the solar system.	The Guardian

2014/11/14	Atterragem da sonda Philae no comet 67P/CG. Mesmo de lado, o Philae está recolher dados 'espetaculares'.	Diário de Notícias
2014/08/07	Interview with Teresa Firmino of Público on the structure of comet 67P/CG	Público
2014/07/17	Cometa 'duplo' surpreende cientistas da sonda Rosetta. Missão europeia que vai ao 67P Churyumov-Gerasimenko revela que ele tem dois blocos. Pedro Lacerda, um astrofísico português no Instituto Max Planck estuda dados da sonda.	Diário de Notícias
2014/07/16	Interview on the surprising shape of comet 67P/CG, target of the Rosetta Mission.	New Scientist
2014/07/16	Comment on the remarkable images by ESA Rosetta spacecraft revealing comet target as a twin and not a single body,	Daily Mail

# Interview (tv / radio show)

	Program	Theme
2018/05/03 - 2018/05/03	Good Morning Ulster, BBC Radio Ulster	Ulster Museum exhibition and Royal Society APEX award on "Comets through the eyes of the Anglo-Saxons."
2015/07/15 - 2015/07/15	Sky News	New Horizons flyby of Pluto
2015/06/28 - 2015/06/28	A Quinta Essência	A Quinta Essência da Astrofísica
2014/11/12 - 2014/11/20	TSF Rádio Notícias	Rosetta/Philae Landing on comet 67P
2014/11/12 - 2014/11/12	Edgar Canelas	Rosetta/Philae Landing on comet 67P
2014/11/12 - 2014/11/12	Rádio Renascença Notícias	Rosetta/Philae Landing on comet 67P
2013/03/12 - 2013/03/12	BBC Radio Ulster: Good Morning Ulster	Comet C/2011 L4 PANSTARRS
2013/03/12 - 2013/03/12	Highland Radio - Main News Bulletin	Comet C/2011 L4 PANSTARRS
2013/03/11 - 2013/03/11	BBC Radio Ulster News	Comet C/2011 L4 PANSTARRS
2013/02/15 - 2013/02/15	Caroline Fleck Show - Downtown Radio	Close approach of near-Earth asteroid 2012 DA14

# Journal scientific committee

	Journal title (ISSN)	Publisher
2019 - Current	Nature Astronomy	Springer

2017 - Current	The Astrophysical Journal	IOP Science
2015 - Current	Monthly Notices of the Royal Astronomical Society	Oxford University Press
2010 - Current	Science	AAAS
2009 - Current	Planetary and Space Sciences	Elsevier
2008 - Current	The Astrophysical Journal Letters	IOP Science
2008 - Current	The Astronomical Journal	IOP Sciences
2007 - Current	Astronomy and Astrophysics	EDP Sciences
2005 - Current	Icarus	Elsevier

	• -			•	
1)	isti	ın	Cti		nc
	136		CL		

Δ	۱A	/2	r	a
$\overline{}$	WA	v c		ч

2017	Royal Society APEX Award (co-I) The Royal Society, United Kingdom Queen's University Belfast - Student Union, United Kingdom
2008	Royal Society Newton International Fellowship The Royal Society, United Kingdom

## Title

2013	Max Planck Research Group Leader
	Max-Planck-Institut für Sonnensystemforschung, Germany

# Other distinction

2019	Most Innovative Learning Experience Runner up
	Queen's University Belfast - Student Union, United Kingdom
2018	Most Inspirational Education Award Nomination Queen's University Belfast - Student Union, United Kingdom
2017	Asteroid (10694) Lacerda is named after Dr. Pedro Lacerda International Astronomical Union, France