

UNIVERSITÀ DEGLI STUDI DI MILANO

Procedura di selezione per la chiamata a professore di I fascia da ricoprire ai sensi dell'art. 18, comma 1, della Legge n. 240/2010 per il settore concorsuale 02/C1, (settore scientifico-disciplinare FIS/05) presso il Dipartimento di Fisica "Aldo Pontremoli", (avviso bando pubblicato sulla G.U. n. 59 del 26/07/2022) - Codice concorso: 5026

[Giuseppe Lodato] CURRICULUM VITAE

INFORMAZIONI PERSONALI (NON INSERIRE INDIRIZZO PRIVATO E TELEFONO FISSO O CELLULARE)

COGNOME	LODATO
NOME	GIUSEPPE
DATA DI NASCITA	9 LUGLIO 1974

TITOLI

TITOLO DI STUDIO

30 Settembre 1998: Laurea in Fisica presso *l'Università di Pisa*, con una votazione di 110/110 e lode, tesi dal titolo "**Dischi di accrescimento autogravitanti**", relatore Prof. G.Bertin.

TITOLO DI DOTTORE DI RICERCA O EQUIVALENTI

7 Ottobre 2002: Diploma di Perfezionamento in Fisica (equivalente al Dottorato di Ricerca), presso la *Scuola Normale Superiore di Pisa*, con una votazione di 70/70 e lode, tesi dal titolo: "**Observational tests for self-gravitating accretion disks**", relatore Prof. G. Bertin.

ALTRI TITOLI CONSEGUITI

(Ordine cronologico inverso)

- **28 Marzo 2017** - Abilitazione Scientifica Nazionale (ASN) come *Professore di Prima Fascia (Ordinario)*, settore scientifico-disciplinare 02/C1 (Astronomia, Astrofisica, Fisica della Terra e dei Pianeti)
- **19 Dicembre 2008 - presente:** *Professore Associato*, settore scientifico-disciplinare FIS/05, presso *l'Università degli Studi di Milano*.
- **Agosto-Ottobre 2009:** *Research Fellow* presso lo *Isaac Newton Institute for Mathematical Sciences, Università di Cambridge, UK*.
- **1 Ottobre 2006 - 18 Dicembre 2008:** *Lecturer in Theoretical Astrophysics*, presso *l'Università di Leicester, UK*.
- **1 Ottobre 2002 - 30 Settembre 2006,** *Post-Doctoral Research Associate* presso *l'Institute of Astronomy, Università di Cambridge, UK*.
- **20 Luglio 1992:** Diploma di Maturità Classica presso il Liceo Classico "G. Garibaldi" di Palermo, con votazione finale di 60/60.

INDICATORI ASN ATTUALI (DA SCOPUS E WOS)

Numero articoli ultimi 10 anni: **112** (soglia da Commissario: 66)

Numero citazioni ultimi 15 anni: **5735** (soglia da Commissario: 3600)

Indice H ultimi 15 anni: **44** (soglia da Commissario: 33)

ATTIVITÀ DIDATTICA

INSEGNAMENTO “UNDERGRADUATE”

Totale carico didattico attuale (anno accademico 2021-22): 126 ore all'anno tra i corsi di Laurea Triennale in Fisica e in Chimica Industriale, Laurea Magistrale in Fisica e Corso di Dottorato in Fisica, Astrofisica e Fisica Applicata presso l'Università degli Studi di Milano.

- **2018 - presente:** responsabile di un modulo del Corso di “**Introduzione all'Astrofisica**”, per il Corso di Laurea Triennale in Fisica, Università di Milano (**carico didattico: 10 ore**).
- **2017 - presente:** responsabile del Corso di “**Fisica Cosmica 2**”, per il Corso di Laurea Magistrale in Fisica, Università di Milano (tenuto ad anni alterni con Fisica Cosmica 1). (**carico didattico: 42 ore**)
- **2008 - presente:** Responsabile del Corso di “**Fisica Cosmica 1**”, per il Corso di Laurea Magistrale in Fisica, Università di Milano (**carico didattico: 48 ore**, a partire dal 2017: **42 ore**)
- **2009 - presente:** Responsabile del Corso di “**Fisica Generale**”, Corso di Laurea Triennale in Chimica Industriale, Università di Milano (**carico didattico: 64 ore**)
- Anni Accademici **2015-16** e **2017-18:** docente del corso “Protostellar disc evolution and planet formation” presso l'Istituto Universitario di Studi Superiori (IUSS) di Pavia (**carico didattico: 24 ore**)
- **2007 - 2008:** Lecturer del corso “**Interaction of radiation and matter**”, all'Università di Leicester.
- **2002 - 2006:** Assistente ai corsi “Astrophysical Fluid Dynamics” e “Stellar Dynamics and Structure of Galaxies” presso l'Università di Cambridge.

INSEGNAMENTO “POST-GRADUATE” (DOTTORATO)

- **Febbraio 2022:** Invited Lecturer allo European Southern Observatory (ESO) su “Advanced doctoral lectures: The Physics of Planet-forming Disks”.
- **2009 - presente:** Responsabile di un modulo di “**Approfondimenti di astrofisica e fisica del plasma**”, per il corso di Dottorato in Fisica, Astrofisica e Fisica Applicata, Università degli Studi di Milano. (**carico didattico: 10 ore**)
- **Settembre 2009:** Docente per la Scuola F. Lucchin “Simulations of complex phenomena in Astrophysics - First light after the dark ages”.
- **Giugno 2007:** Docente per la summer school “On The Fringe: Circumstellar disks and planets at very high resolution”, Porto, Portogallo.

ATTIVITÀ DI DIDATTICA INTEGRATIVA E DI SERVIZIO AGLI STUDENTI

ATTIVITÀ DI RELATORE DI ELABORATI DI LAUREA, DI TESI DI LAUREA MAGISTRALE, DI TESI DI DOTTORATO

- **PhD students:**

Complete:

1. P. Cossins (Leicester 2009),
2. G. Dipierro (Milano, 2017 - Tacchini Award of the Italian Astronomical Society for Best PhD Thesis in Astrophysics in 2017) - attualmente impiegato nell'industria.
3. C. Bonnerot (co-supervised with E. Rossi, Leiden 2017) - attualmente Marie Curie Fellow al Niels Bohr Institute, Copenhagen (Danimarca).
4. A. Franchini (Milano, 2018) - attualmente ERC-funded postdoc all'Università di Milano-Bicocca (Italy).

5. E. Ragusa (Milano, 2018) - attualmente ERC funded post-doc alla Ecole Normale Supérieure, Lyon (Francia).
6. M. G. Ubeira Gabellini (Milano, 2020) - attualmente post-doc presso il S. Raffaele (Milano).
7. B. Veronesi (Milano, 2021) - attualmente ERC-funded post-doc alla Ecole Normale Supérieure, Lyon (Francia).
8. M. Toscani (Milano, 2021) - attualmente post-doc a Tolosa (Francia).

In svolgimento:

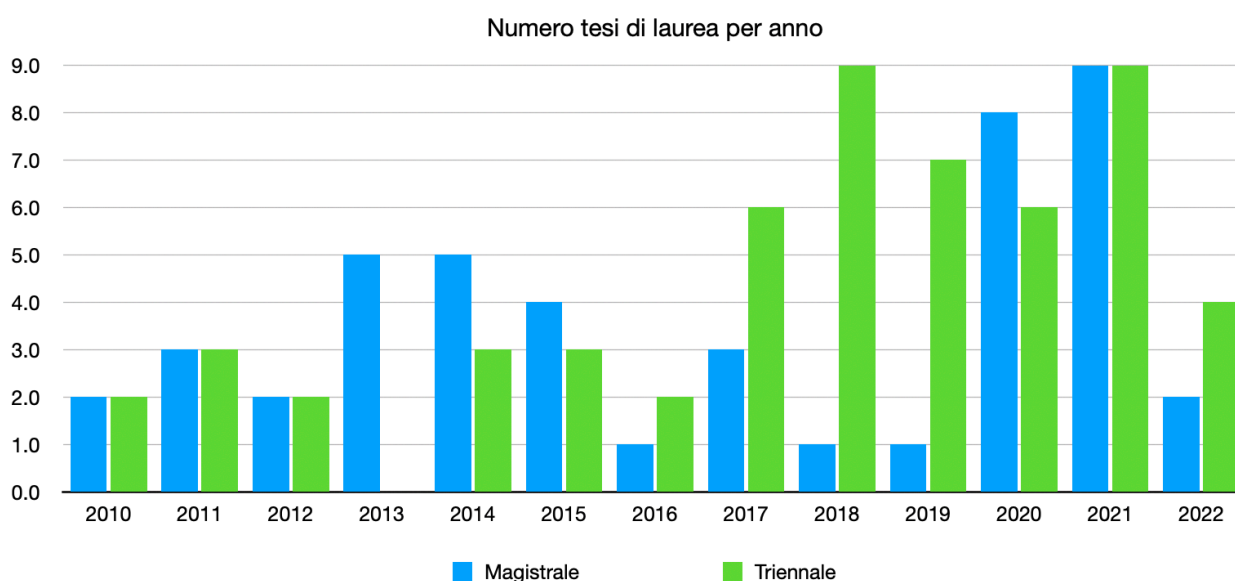
9. Simone Ceppi (Milano, exp. 2024).
10. Cristiano Longarini (Milano, exp. 2024).

• Tesi di laurea Magistrali

Numero totale dal 2010: **46** (Università degli studi di Milano, Corso di Laurea in Fisica), **2** (Università degli Studi di Pavia)

• Tesi di laurea Triennali

Numero totale dal 2010: **56** (Università degli studi di Milano, Corso di Laurea Triennale in Fisica), **2** (Università degli Studi di Pavia)



ATTIVITÀ DI TUTORATO DEGLI STUDENTI DI CORSI DI LAUREA E DI LAUREA MAGISTRALE E DI TUTORATO DI DOTTORANDI DI RICERCA

“Docente tutor” del Corso di Laurea Triennale in Fisica, Università degli Studi di Milano.

ESAMI DI MERITO

Numero di esami di merito verbalizzati nell'ultimo triennio (dal 2018)

- *Fisica Generale*: 298
- *Fisica Cosmica 1*: 50
- *Fisica Cosmica 2*: 48
- *Introduzione all'Astrofisica*: 197

ATTIVITÀ GESTIONALI, ORGANIZZATIVE E DI SERVIZIO

INCARICHI DI GESTIONE E AD IMPEGNI ASSUNTI IN ORGANI COLLEGIALI E COMMISSIONI, PRESSO RILEVANTI ENTI PUBBLICI E PRIVATI E ORGANIZZAZIONI SCIENTIFICHE E CULTURALI, OVVERO PRESSO L'ATENEO O ALTRI ATENEI

A LIVELLO DI ATENEO

2021-presente: Membro del Comitato scientifico per il restauro della cupola nell'Orto Botanico di Brera.

2020-presente: Membro della *Commissione di Ateneo per l'analisi integrata dei dati relativi alle attività di ricerca*.

2020-presente: Membro di *Unimi 2040*, gruppo di progetto rettorale.

2017-presente: Membro della *Commissione Open Access di Ateneo*.

2014-2018: Membro dell'*Osservatorio alla Ricerca* dell'Università degli Studi di Milano.

GESTIONE DIPARTIMENTALE

2011-2021: Membro della *Giunta di Dipartimento di Fisica*, Università degli Studi di Milano.

2012-2020: Membro della *Commissione Paritetica Docenti Studenti*, Università degli Studi di Milano.

2016-2018: Membro del *Consiglio della Biblioteca di Fisica*, Università degli Studi di Milano.

2011-2013: *Direttore della sezione locale della RIAA* (Rete Interuniversitaria per l'Astronomia e l'Astrofisica).

COMMISSIONI DI CONCORSO

2021: Commissione di Concorso per RTD-B, Università degli Studi di Milano.

2019: Commissione di Concorso per RTD-B, Istituto Universitario di Studi Avanzati (Pavia).

2019: Commissione di Concorso per Professore di Seconda Fascia, Università degli Studi di Milano.

2018: Commissione di Concorso per RTD-A, Università degli Studi di Firenze.

ATTIVITÀ DI VALUTAZIONE IN SELEZIONI COMPETITIVE

- **2022: Panel Member per le Marie Curie Actions** - Research and Innovation Staff Exchange (RISE)
- **2021: Panel Member del TAC** per il telescopio spaziale *Swift*.
- **2021: Panel Member per le Marie Curie Actions** - Individual Fellowships.
- **2020: Panel Member per le Marie Curie Actions** - Research and Innovation Staff Exchange (RISE).
- Valutatore per il MIUR per: VQR 2021, PRIN 2009, VQR 2013, VQR 2014, SIR 2014.
- Valutatore di progetti di ricerca per: ERC Starting e Advanced Grants, European Science Foundation, NASA (USA), NWO (Olanda), DFG (Germania), FWO (Belgio), ANR (Francia), NCN (Polonia), Cineca.
- **2008-2009: Panel member dell'Observing Programmes Committee (OPC)** per l'European Southern Observatory (ESO).
- Regolare attività di Referee per le seguenti riviste: MNRAS, A&A, ApJ, Science, Nature, New Astronomy, Physics Letters A, Astrophysics and Space Sciences, European Physics Journal Plus.

ALTRI RUOLI DI COORDINAZIONE

- **Direttore della Scuola di Dottorato "1st Dustbusters School on Planet Formation"**, Gargnano sul Garda, 16-20 Maggio 2022.

ATTIVITÀ DI RICERCA SCIENTIFICA

HIGHLIGHTS AND ESTEEM INDICATORS

1. **Formazione planetaria e dischi protoplanetari:** Coordinatore del Network Marie-Curie RISE “Dustbusters”. dustbusters.fisica.unimi.it
2. **Dischi di accrescimento autogravitanti:** Autore di un ARA&A su questo argomento.
3. **Astrofisica dei fluidi.** Co-sviluppatore del codice Smoothed Particle Hydrodynamics PHANTOM: <https://phantomsph.bitbucket.io>
4. **Multi-messenger astronomy and gravitational waves:** membro del LISA Consortium e coordinatore del LISA Research Group “Astroblack Italy” <https://sites.google.com/view/astroblack-italy/home>
5. **Tidal Disruption Events** (distruzione mareale di stelle da buchi neri supermassicci): Autore di 6 Space Science Reviews sull’argomento.

GRANT COMPETITIVI

GRANTS UNDER REVIEW

- **PRIN 2022**, coordinatore, budget complessivo: ~ 250 kEuro.

GRANTS OTTENUTI COME PI

- **Marie-Curie RISE** “DUSTBUSTERS: Dust and gas in planet forming discs”, Coordinatore, **649000 Euro** (2019-2022). <https://dustbusters.fisica.unimi.it>
- **“Transition Grant”**: finanziamento biennale dell’Università degli Studi di Milano **15000 Euros** (2015)
- **Grant dello ESF (European Science Foundation): 15000 Euros** (2013)
- **PUR biennale** dell’Università degli Studi di Milano: **13000 Euros** (2009)

GRANTS OTTENUTI COME CO-I

- 2022: **Titolo:** “YODA (YSO Outflows, Disks and Accretion): towards a global framework for the evolution of planet forming systems”. **Ruolo:** ordinatore di uno dei tre WP e della UdR di Milano. **Finanziatore:** INAF (Large Grants). Durata: 2 anni. **Costo:** 200kEuro.
- 2021: **Titolo:** “Planetary systems at early ages”. **Finanziatore:** PRIN-INAf. **Ruolo:** Coordinatore della Unità di Ricerca di Milano. **Durata:** 2 anni. **Costo:** 164kEuro
- 2017 - **Titolo:** “GENESIS-SKA: GENeral conNditions in Early planetary Systems for the rISe of life with SKA”. **Finanziatore:** PRIN-INAf. **Ruolo:** Coordinatore della Unità di Ricerca di Milano. **Costo:** **24.2 kEuro** (Unità locale), **480kEuro** (totale)
- **3 years Grant** dallo ARC (Australian Research Council) “Gaps, rings and holes in protoplanetary discs: signs of newborn planets?”: **372000 AUD** (2018-2020)

OBSERVING AND COMPUTING ACCEPTED PROPOSALS

Facility: UK Astrophysical Fluid Facility (piattaforma di calcolo ad alte prestazioni)

- PI nei seguenti progetti (~ 30 khours di calcolo ciascuno):
- 1. “Triggered planet formation in self-gravitating discs”. In collaborazione con Cathie Clarke (Cambridge, Co-I) (2006).
- 2. “The dynamics of warped discs”. In collaborazione con Marta Volonteri (Cambridge, Co-I). (2005)

3. "Planet-disc interaction in FU Orionis objects". In collaborazione con Ken Rice (St. Andrews University, Co-I) e Gennaro D'Angelo (Exeter University, Co-I) (2004).

4. "The dynamics of self-gravitating accretion discs". In collaborazione con Ken Rice (St. Andrews University, Co-I), (2004).

• Co-I nei seguenti progetti (~ 30 khours di calcolo ciascuno):

5. "The effect of temperature dependent cooling time on the fragmentation of massive accretion discs". In collaborazione con Peter Cossins (Leicester University, PI), (2007).

6. "Dust settling in self-gravitating discs". In collaborazione con Ken Rice (St. Andrews University, PI), (2004).

7. "The evolution of dust and small planetesimals in self-gravitating protoplanetary discs". In collaborazione con Ken Rice (St. Andrews University, PI), (2004).

8. "Testing the locality of transport in self-gravitating accretion disks". In collaborazione con Ken Rice (St. Andrews University, PI), (2003).

Facility: CINECA

• Co-I nei seguenti progetti approvati

9. ISCRAC project "Dust dynamics in planet forming environments". PI: Longarini (mio PhD student). 3 khours (2022)

10. ISCRAC project "Differential accretion in low viscosity accretion discs ". PI: Ceppi (mio PhD student) 3 khours (2022).

Facility: INDACO

• Co-I nel seguente progetto approvato

11. "Competitive accretion in low viscosity accretion discs". PI: Ceppi (mio PhD student). 25 khours (2022)

Facility: Atacama Large Millimeter Array (ALMA)

Co-I nei seguenti progetti accettati (tot: ~ 360h):

Cycle 9: 2022.1.00874.S (9.4h), 2022.1.01531.S (15.7h), 2022.1.01724.S (16.6h)

Cycle 8: 2021.1.01123.L (Large Programme ExoALMA, 180h), 2021.1.01050.S (17.1h), 2021.1.00690.S (21.9h)

Cycle 7: 2019.1.01270.S (3h), 2019.1.00607.S (13.8h), 2019.1.01120.S (13.9h), 2019.1.00566.S (11.6h)

Cycle 6: 2018.1.01430.S (10.6h), 2018.1.00771.S (14.9h), 2018.1.00614.S (12.2h)

Cycle 5: 2017.1.01404.S (5.4h), 2017.1.01247.S (3.2h)

Cycle 4: 2016.1.01164.S (11.1h), 2016.A.00026.S (1h)

Facility: VLT-SPHERE

Co-I nei seguenti proposal accettati (tot: 19h):

298.C-5014(A) (3h) , 0101.C-0350(A) (8h) - 0103.C-0847(A) (8h)

Facility: VLT-XShooter

Co-I nei seguenti proposal accettati (Tot: ~36h):

0101.C-0866(A) (2h), 0105.C-0514(C) (2h), 0105.C-0514(B) (5.2h), 0105.C-0514(A) (5.8h), 0106.C-0984(C) (2h),

0106.C-0984(B) (5.2h), 0106.C-0984(A) (5.8h)

Facility: VLT-UVES/ESPRESSO/XShooter

Co-I nel Large Program PENELLOPE (1106.C-1047(K) - PI: Manara) distribuito su 4 observing periods per un totale di: 135h (ESPRESSO); 47h (XShooter); 73h (UVES).

ORGANIZZAZIONE, DIREZIONE E COORDINAMENTO DI CENTRI O GRUPPI DI RICERCA NAZIONALI E INTERNAZIONALI O PARTECIPAZIONE AGLI STESSI

2019 - presente: Coordinatore del MSCA-RISE Network “Dustbusters” dustbusters.fisica.unimi.it

2018 - presente: Coordinatore del research group “AstroBlack Italy”, all’interno della LISA Collaboration. <https://sites.google.com/view/astroblack-italy/home>

2014 - 2016: Membro del team “There it spins” per lo ISSI (International Space Science Institute), Berna, Svizzera.

2007 - 2009: Membro dello steering committee del Research Network “ASTROSIM”, finanziato dallo European Science Foundation.

MEMBRO DEL SOC IN CONFERENZE INTERNAZIONALI

1. “Planet and binary formation in gravitationally unstable protoplanetary discs in the high-resolution era”, Leicester, UK, **Settembre 2022**.
2. EAS 2020: Special session on “Planet formation enters the observational era”, *Leiden*, **Giugno 2020**.
3. Organizzatore del “Milan Christmas Astronomy Workshop”, **20 Dicembre 2019**.
4. “Great barriers in planet formation”, *Palm Cove, Australia*. **Luglio 2019**.
5. “Protoplanetary disks seen through the eyes of new generation high-resolution instruments”, *Roma, Italy*. **Giugno 2018**
6. “The accreting Universe”, *Shanghai, China*. **Luglio 2017**.
7. Kavli workshop “The disc migration issue: from protoplanets to supermassive black holes”, *Cambridge, UK*. **Maggio 2017**.
8. “Episodic Accretion”, special session dello EWASS (European Week of Astronomy and Space Sciences, *Atene, Grecia* **Luglio 2016**.
9. “Disc dynamics and planet formation”, *Cipro*, **Giugno 2015**.
10. Organizzatore del “Milan Christmas Astronomy Workshop”, **18-20 Dicembre 2014**.
11. Organizzatore della conferenza “High energy tidal disruption events: looking at the future”, *Favignana, Italy*, **Settembre 2013**.
12. “Black Hole (g)Astronomy: exploring the different flavours of accretion”, *Brindisi, Italy*, **Settembre 2013**.
13. “Advances in Computational Astrophysics”, *Ascona, Svizzera*, **Luglio 2008**.

ATTIVITÀ QUALI LA DIREZIONE O LA PARTECIPAZIONE A COMITATI EDITORIALI DI RIVISTE SCIENTIFICHE

- **Membro del Comitato Scientifico** della Collana Editoriale “UniMi 2040 Discussion Papers”, Milano University Press.
- **Guest Editor** per lo European Physics Journal Plus (Rivista della Società Italiana di Fisica. 5y IF: 3.3)

PREMI E RICONOSCIMENTI NAZIONALI E INTERNAZIONALI PER ATTIVITÀ DI RICERCA

2018: “Discovery International Award”, Australian Research Council (**8000 AUD**).

2009: Research Fellow, Isaac Newton Institute for Mathematical Sciences, University of Cambridge (UK).

PARTECIPAZIONE IN QUALITÀ DI RELATORE A CONGRESSI E CONVEGNI DI INTERESSE INTERNAZIONALE

Highlight: **Invited speaker in 32 conferenze internazionali.**

1. **May 2022:** *"EcoGal Small scale retreat"*, Pascal Institute, Paris, France. **Invited talk.**
2. **October 2021:** *"Gaps, Rings, Spirals, and Vortices: Structure Formation in Planet-Forming Disks"*, MIAPP, Garching, Germany. **Invited Talk.**
3. **September 2021:** *"Planet-forming Disks: From Surveys to Answers"*, Lorentz Center, Leiden, Netherlands. **Contributed talk.**
4. **May 2021:** *"Core2Disk: From prestellar cores to solar nebulae: the Formation and Evolution of Proto-planetary discs"*, Paris, France. **Invited Talk.**
5. **May 2021,** *"Distorted Astrophysical Discs: New Insights and Future Directions"*, Cambridge, UK. **Contributed talk.**
6. **January 2020:** *"Tidal disruption events: general relativistic transients"*, Kyoto, Japan. **Invited talk.**
7. **January 2020:** *"235th AAS Meeting"*, Hawaii, USA. **Invited talk.**
8. **May 2019:** *"Theoretical and Computational Challenges in Planet Formation"*, New York, USA. **Contributed talk.**
9. **March 2019:** *"Planet forming discs"*, Menaggio, Italy.
10. **October 2018:** *"Using Tidal Disruption Events to study supermassive black holes"*. Bern, Switzerland. **Invited talk.**
11. **July 2018:** COSPAR General Assembly, Pasadena, USA. **Invited talk.**
12. **June 2018:** *"Protoplanetary disks seen through the eyes of new generation high-resolution instruments"*, Rome, Italy, Member of the SOC.
13. **January 2018:** Aspen Winter Conference *"Using Tidal Disruption Events to Study Super-Massive Black Holes"*, Aspen, USA. **Invited talk.**
14. **September 2017:** *"Tidal disruption events: piercing the sphere of influence"*, Cambridge, UK. **Invited talk.**
15. **July 2017:** *"Disc instabilities across cosmic scales"*, Sexten, Italy. **Invited talk.**
16. **June 2017:** *"MIAPP Workshop on Protoplanetary discs and planet formation and evolution"*, Munich, Germany. **Invited talk.**
17. **May 2017:** *The disc migration issue: from protoplanets to supermassive black holes*, Cambridge, UK, Member of the SOC.
18. **October 2016:** *Shining from the heart of darkness: black hole accretion and jets*, Kathmandu, Nepal. **Contributed talk.**
19. **September 2016:** *Active Galactic Nuclei 12: a Multi-messenger perspective*, Napoli, Italy. **Invited talk.**
20. **May 2016:** *Resolving planet formation in the era of ALMA and extreme AO*, Santiago, Chile. **Invited talk.**
21. **March 2016:** *Protoplanetary Disc(ussions)*, Edinburgh, UK.
22. **November 2015:** *Jerusalem TDE Workshop*, Jerusalem, Israel. *"Lense-Thirring precession during tidal disruption events"*, **Contributed talk.**
23. **September 2015:** *ISSI Meeting "There is spin"*, Bern, Switzerland. *"Dynamics of warped accretion discs"*. **Invited talk.**
24. **August 2015:** *XXIX IAU General Assembly*, Honolulu, USA. *"Evolution of supermassive black hole binaries in gaseous environments"*. **Contributed talk.**

25. **June 2015:** *Disc dynamics and planet formation*, Cyprus. SOC member.
26. **December 2014:** *Swift: ten years of discoveries*, Roma, Italy. "Recent developments in TDE theory". **Invited talk.**
27. **July 2014:** *Gravitational waves and electromagnetic observations of dense stellar systems*, Roma, Italy. "Disc precession in tidal disruption events". **Invited talk.**
28. **June 2014:** *Unsolved Problems in Astrophysics and Cosmology*, Budapest, Hungary. "Supermassive black hole binaries: the case for misaligned spins". **Invited talk.**
29. **April 2014:** *Herbig Ae/Be stars: the missing link in star formation*, Santiago, Chile. "Spiral structure and gravitational instabilities in protostellar discs". **Invited talk.**
30. **December 2013:** *27th Texas Symposium on Relativistic Astrophysics*, Dallas, USA. "On the Likelihood and Prompt Electromagnetic Emission of Black Hole Binary Mergers". **Contributed talk.**
31. **September 2013:** *High Energy Tidal Disruption Events: Looking at the Future*, Favignana, Italy. Scientific organizer of the meeting.
32. **September 2013:** *Explosive Transients: Lighthouses of the Universe*, Santorini, Greece. "Tidal disruption events". **Invited talk.**
33. **July 2013:** *Mind the gap: from microphysics to large scale structure of the universe*, Cambridge, UK. "Warped accretion discs and spin alignment during SMBH mergers". **Contributed talk.**
34. **June 2013:** *The Lin-Shu Symposium: 50 Years of Spiral Density Wave*, Beijing, China. "Spiral structure and gravitational instabilities in protostellar discs". **Invited talk.**
35. **June 2012:** *Tidal Disruption events and AGN outbursts*, Madrid, Spain. "Challenges in the modeling tidal disruption events light curves". **Invited talk.**
36. **September 2011:** *IAU Symposium 285. New Horizons in Time Domain Astronomy*, Oxford, UK. "Modeling the lightcurve of tidal disruption events". **Invited talk.**
37. **June 2011:** *Advances of Computational Astrophysics: methods, tools and outcomes*, Cefalù, Italia. "Simulations of electromagnetic signatures from coalescing black holes". **Contributed talk.**
38. **March 2011:** *Bridging electromagnetic astrophysics and cosmology and gravitational waves*, Milano, Italia. "Simulations of electromagnetic emission from black hole mergers". **Invited talk.**
39. **September 2010:** *IAU Symposium 276. The Astrophysics of Planetary Systems: Formation, Structure, and Dynamical Evolution*, Torino, Italia.
40. **September 2010:** *Gravitational-wave and electromagnetic signatures of massive black hole binaries and extreme mass-ratio inspirals*, Parigi, Francia. "The last 0.1 pc problem". **Invited talk.**
41. **February 2010:** *Massive black hole binaries in the cosmic landscape*, Zurich, Svizzera. "Evolution of circumbinary accretion discs around a SMBH binary". **Contributed talk.**
42. **December 2009:** *Plasmas in the laboratory and in the Universe: interactions, patterns and turbulence*, Como, Italia. "Characterising gravitational instabilities in protostellar discs". **Invited talk.**
43. **November 2009:** *From circumstellar disks to planetary systems*, Garching, Germany. "The dynamics of solids in self-gravitating protostellar discs". **Invited talk.**
44. **September 2009:** *Planetesimal formation*, Cambridge, UK. "Planetesimals formation in self-gravitating protostellar discs". **Invited talk.**
45. **September 2009:** *Angular Momentum Transport and Energy Release in Accretion Discs*, Cambridge, UK. "The evolution of circumbinary discs around a SMBH binary". **Invited talk.**
46. **August 2009:** *Dynamics of discs and planets*, Cambridge, UK.

47. **April 2009:** *Intermediate-Mass Black Holes: from First Light to Galactic Nuclei*, Irvine, USA. "Early growth of massive black hole seeds from gas collapse in pre-galactic discs". **Contributed talk.**
48. **March 2009:** *Observational Signatures of Black hole mergers*, **Baltimore, USA.**
49. **September 2008:** *Joint European and National Astronomy Meeting*, Vienna, Austria. "Self-gravitating protoplanetary discs". **Invited talk.**
50. **January 2008:** *AAS 211th Meeting*, **Austin, USA.** **Invited talk:** "Two new results in accretion disc dynamics".
51. **September 2007:** *From protostellar cores to disk galaxies*, **Zurich (Switzerland).**
52. **May 2007:** *Multiplicity in star formation*, **Toronto (Canada).** "2MASS1207 and the potential for planet formation around brown dwarfs". **Contributed talk.**
53. **December 2006:** *Collective phenomena in macroscopic systems*, Como (Italy). "Gravitational instabilities in gaseous discs". **Invited talk.**
54. **July 2006:** *The Planet-Disc Connection*, **University of Cambridge (UK).**
55. **May 2006:** *From Protostellar disks to planetary systems*, University of Western Ontario (Canada). **Invited talk.**
56. **January 2006:** *207th Meeting of the American Astronomical Society*, Washington D.C. (USA). "On the dynamics of misaligned accretion discs and spinning black holes". **Poster contribution.**
57. **October 2005:** *"Protostars and Planets V"*, Hawai'i, USA. Co-author of a review talk and of two poster contributions.
58. **April 2005:** *"RAS National Astronomy Meeting"*, Birmingham (UK). "Planet formation in massive protostellar discs". **Contributed talk.**
59. **March 2005:** *"From disks to planets: new observations, models, theories"*, Pasadena (USA). "The photometric evolution of FU Orionis objects: disc, wind, envelope and their interactions". **Contributed talk**
60. **October 2004:** *"Low mass stars and brown dwarfs: IMF, accretion and activity"*, **Volterra (Italy).** "Planetesimal dynamics in self-gravitating protoplanetary discs". **Contributed talk.**
61. **June 2004:** *"2nd Heidelberg-Tuebingen Workshop on Astrophysical Fluid Dynamics"*, Heidelberg (Germany). "Accelerated planetesimal growth in self-gravitating protoplanetary discs". **Contributed talk.**
62. **April 2004:** *"Modeling the structure, chemistry and appearance of protoplanetary disks"*, Munich (Germany). "Massive planets in FU Ori disks: implications for thermal instability". **Contributed talk.**
63. **March 2004:** *"Planet formation: terrestrial and extra-terrestrial"*, **Santa Barbara (USA).**
64. **September 2003:** *"Plasmas in the Laboratory and in the Universe: new insight and new challenges"*, Como (Italy). "Testing the locality of transport in self-gravitating accretion discs". **Contributed talk.**
65. **September 2003:** *"UKAFF (UK Astrophysical Fluid Facility) Conference"*, Leicester (UK). "Characterizing transport in self-gravitating accretion discs". **Contributed talk.**
66. **May 2003:** *"Star formation near and far: the ALMA promise"*, Elba Island (Italy). "Probing the outer disk in FU Orionis with long-wavelength spectroscopy". **Contributed talk.**
67. **May 2003:** *"Dynamics and evolution of Galaxies"*, meeting of the Italian Accademia dei Lincei, Rome (Italy). "A massive accretion disk in the nucleus of NGC 1068". **Contributed talk.**
68. **July 2002:** *"AGN 2002: from central engine to host galaxy"*, **Meudon, (France).** "Non-Keplerian rotation in NGC 1068". **Poster contribution**
69. **June 2002:** *V Italian Meeting on AGNs*, **Como (Italy).** "Non-Keplerian rotation in AGNs". **Poster contribution.**

70. **January 2002:** *199th Meeting of the American Astronomical Society*, Washington, (USA). "Self-gravitating accretion disks in YSOs". Poster contribution.
71. **September 2001:** *JENAM 2001 - Joint European and National Astronomy meeting*, Munich (Germany). "Self-regulation in self-gravitating accretion disks". **Contributed talk.**
72. **April 2001:** *The Origins of Stars and Planets: the VLT View*, Garching (Germany). "Self-gravitating protostellar disks". Poster contribution.
73. **February 2001:** *Workshop on "Dynamics of elliptical galaxies"*, Bologna (Italy). "Accretion in self-regulated disks". Poster contribution.
74. **June 2000:** *High-mass star formation: an origin in Clusters?*, Volterra (Italy). "Self-gravitating accretion disks". Poster contribution.
75. **June 1999:** *Workshop on "Dynamics of Galaxies"*, Pisa (Italy). **Contributed talk.**

INVITED SEMINARS E COLLOQUIA

1. EcoGal online seminar, 30/6/2022
2. Milano (Italy), Università degli Studi di Milano-Bicocca, 19/11/2021
3. Zurich (Switzerland), ETH, 22/10/2020.
4. Melbourne (Australia), Monash Centre for Astrophysics Seminar, 12/8/2019
5. Firenze (Italy), Osservatorio Astrofisico di Arcetri, 5/7/2018
6. Garching (Germany), Max Planck Institute for Extra-Terrestrial Physics (MPE), 13/6/2018
7. Trieste (Italy), Dipartimento di Fisica, 8/3/2017
8. Bologna (Italy), Dipartimento di Fisica, 12/01/2017
9. Santiago (Cile), Pontificia Universidad del Chile, 24/5/2016
10. Roma (Italia), Osservatorio Astronomico di Monte Porzio, 29/03/2016
11. Rome (Italy), IAPS-INAF, 02/04/2012
12. Palermo (Italy), Osservatorio Astronomico, 22/12/2011
13. Leiden (Netherlands), Sterrenwacht (Osservatorio), 01/12/2011
14. Bologna (Italy), Dipartimento di Fisica, 17/02/2011
15. Florence (Italy), Osservatorio Astronomico di Arcetri, 28/10/2010
16. Jerusalem (Israel), Racah Institute for Physics, 13/04/2010
17. Tuebingen (Germany), Institut fuer Astronomie und Astrophysik, 08/02/2010
18. Sheffield (UK), University of Sheffield, 03/12/2008
19. Manchester (UK), Jodrell Bank Centre for Astrophysics, 07/05/2008
20. Exeter (UK), Department of Astronomy, 29/02/2008
21. Trieste (Italy), Trieste Observatory, 30/01/2008
22. Edinburgh (UK), University of Edinburgh, 07/09/2007
23. Oxford (UK), University of Oxford, 23/01/2007
24. Glasgow (UK), University of Glasgow, 3/11/2006
25. London (UK), Queen Mary University of London, 24/02/2006
26. Boulder (USA), JILA, 20/01/2006

27. New Haven (USA), YCAA, Yale University, 17/01/2006
28. Baltimore (USA), Space Telescope Science Institute, 13/01/2006
29. Palermo (Italy), Palermo Observatory, 02/12/2005
30. Leicester (UK), Department of Astronomy, 28/09/2005
31. Bologna (Italy), Department of Astronomy, 16/06/2005
32. Cambridge(UK), Department of Applied Mathematics and Theoretical Physics, 17/05/2005
33. Riverside (USA), University of California, 23/03/2005
34. Cambridge (UK), Institute of Astronomy, 08/07/2004
35. St. Andrews (UK), School of Physics and Astronomy, 06/04/2004
36. Milan (Italy), Physics Department, 10/02/2004
37. Paris (France), Observatoire de Paris-Meudon, 04/12/2003
38. Paris (France), Institute d'Astrophysique de Paris, 03/12/2003
39. Florence (Italy), Arcetri Observatory, 21/05/2003
40. Cambridge (UK), Institute of Astronomy, 29/01/2003

ATTIVITÀ DI OUTREACH

- **26 Maggio 2022:** Seminario su “Buchi Neri e dove trovarli”, organizzato dall'Osservatorio Polifunzionale del Chianti.
- **3 Maggio 2022:** Seminario su “Buchi Neri e dove trovarli”, organizzato dall'AISF (Associazione italiana studenti di Fisica).
- **7 Giugno 2019:** Seminario sugli Esopianeti organizzato da “Euresis - Organizzazione per la promozione e lo sviluppo della cultura e del lavoro Scientifico”.
- **29 Settembre 2018:** Presentazione a “Meet me Tonight - La notte dei ricercatori”, Giardini Montanelli (Milano).
- **17 Ottobre 2018:** Seminario sulla formazione planetaria presso il Circolo Astrofili di Trezzano (MI).
- **5 Giugno 2018:** Lezione di Astronomia presso il Liceo Scientifico Cremona nell'ambito dell'alternanza scuola-lavoro, Milano.
- **29 Novembre 2017:** Lezione di Astronomia presso la Scuola Statale per Ciechi di via Vivaio, Milano.
- **30 Settembre 2016:** Presentazione sulle Onde Gravitazionali a “Meet me Tonight - La notte dei ricercatori”, Giardini Montanelli (Milano).
- **4 Maggio 2010:** Lezione sui pianeti extra-solari presso l'Università della Terza età (Milano).
- **29 Aprile 2009:** Seminario sulla formazione planetaria presso la libreria FNAC (Milano).

PRODUZIONE SCIENTIFICA

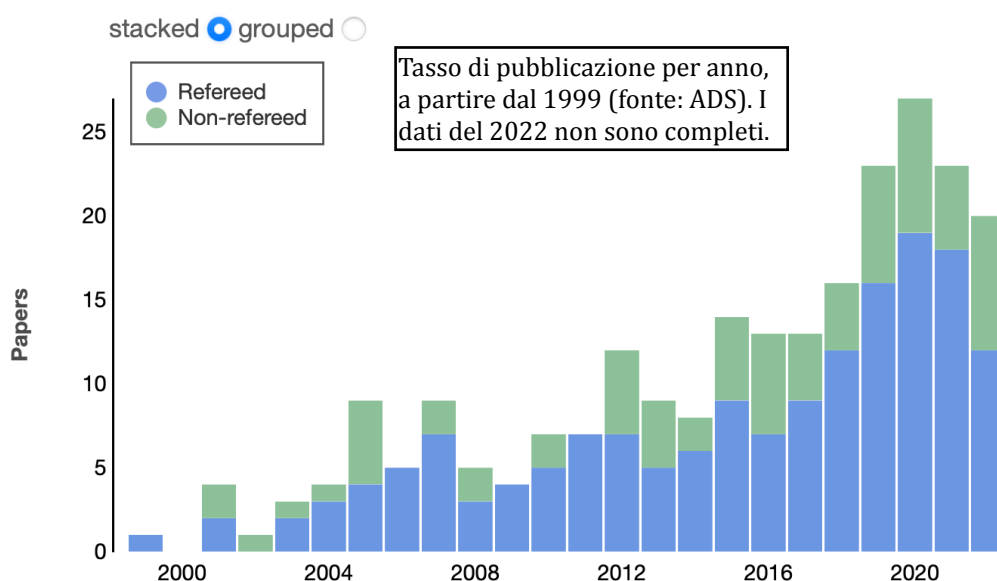
SOMMARIO

INDICI BIBLIOMETRICI (DATI ESTRATTI DALL'ASTROPHYSICS DATA SYSTEM, AGGIORNATI AD AGOSTO 2022)

- Articoli pubblicati (o in stampa) su riviste con referee dal 1999: **167**
- Indice H: **53**
- Articoli a primo o secondo nome: **69**
- Numero di citazioni totali: **9912**
- Numero di citazioni articoli a primo o secondo nome: **5087**
- Citazioni normalizzate per numero di coautori: **2675**

PUBBLICAZIONI AD ALTO IMPATTO

- 2 Articoli su Nature (IF: 43)
- 1 Annual Review of Astronomy and Astrophysics (IF: 38)
- 1 Articolo su Science (IF: 41)
- 6 Space Science Reviews (IF: 9.32)



TOP 12 PUBLICATIONS (SUDDIVISE PER AMBITO SCIENTIFICO)

Self-gravitating accretion discs

1. K. Kratter and G. Lodato, "Gravitational Instabilities in Circumstellar Disks", **Annual Review of Astronomy and Astrophysics**, 54, 271 (2016).
Prestigiosa review che riassume più di 15 anni di lavoro sul tema. Un riferimento classico in questo campo. 267 citazioni.
2. G. Lodato & W. K. M. Rice, "Testing the locality of transport in self-gravitating accretion discs", **MNRAS**, 351, 630 (2004).
Analisi numerica sulla località del trasporto indotto da strutture a spirale nei dischi di accrescimento. 284 citazioni.

3. W. K. M. Rice, **G. Lodato** & P. J. Armitage, “Investigating fragmentation conditions in self-gravitating accretion discs”, **MNRAS**, 364, L56 (2005).

Analisi sulle condizioni di frammentazione per dischi di accrescimento autogravitanti. 294 citazioni.

4. P. Cossins, **G. Lodato** & C. Clarke, “Characterizing the gravitational instability in cooling accretion discs”, **MNRAS**, 393, 1157 (2009).

Lavoro del mio dottorando Cossins per determinare le condizioni per il trasporto locale in dischi di accrescimento autogravitanti. 151 citazioni.

Planet forming discs

5. W.K.M. Rice, **G. Lodato**, J.E. Pringle, I. Bonnell and P.J. Armitage, “Accelerated planetesimal growth in self-gravitating protoplanetary discs”, **MNRAS**, 355, 543 (2004).

Un modello per la formazione di pianetesimi nelle parti esterne dei dischi protostellari. 169 citazioni.

6. Dipierro, G., Price, D., Laibe, G., Hirsh, K., Cerioli, A. and **Lodato, G.**, “On planet formation in HL Tau”, **MNRAS**, 453, L73 (2015).

Il primo modello (per cui ho supervisionato il mio dottorando Dipierro e laureanda Cerioli) di un disco ad anelli in termini di pianeti immersi nel disco, applicato al sistema HL Tau. 196 citazioni.

7. **G. Lodato** & D. Price, “On the diffusive propagation of warps in thin accretion discs”, **MNRAS**, 405, 1212 (2010).

La più completa analisi della propagazione di warp in dischi viscosi. Inoltre, la prima applicazione del codice PHANTOM. 218 citazioni.

8. M. J. Bate, **G. Lodato** & J. E. Pringle, “Chaotic star formation and the alignment of stellar rotation with disc and planetary orbital axes”, **MNRAS**, 401, 1505 (2010).

Un nuovo scenario in cui eventi di accrescimento orientati casualmente determinano la forma dei dischi e l'orientazione delle orbite planetarie. 235 citazioni.

Black holes e Multi-messenger astronomy

9. **G. Lodato** & P. Natarajan, “Supermassive black hole formation during the assembly of pre-galactic discs”, **MNRAS**, 371, 1813 (2006).

Un modello, diventato standard, per la formazione dei “seed” di buchi neri supermassicci ad alto red-shift per collasso diretto. 351 citazioni.

10. M. Volonteri, **G. Lodato** & P. Natarajan, “Evolution of massive black hole seeds”, **MNRAS**, 383, 1079 (2008).

Follow up del mio modello del 2006, in cui prediciamo l'evoluzione della popolazione di BH “seed” massicci a redshift minori. 245 citazioni.

11. **G. Lodato**, A. R. King & J. E. Pringle, “Stellar disruption by supermassive black holes: is the light curve really proportional to $t^{-5/3}$?”, **MNRAS**, 392, 332 (2009).

Paper molto influente che ha determinato un rinnovato interesse nel campo dei tidal disruption events. 269 citazioni.

12. **G. Lodato** & E. M. Rossi, “Multiband lightcurves of tidal disruption events”, **MNRAS**, 410, 359 (2011).

Un modello per l'emissione multiwavelength da tidal disruption events. 228 citazioni.

LISTA COMPLETA DELLE PUBBLICAZIONI (REFEREED)

(in corsivo indico i miei studenti di laurea o di dottorato)

1. Mazzolari, G. et al (including **Lodato, G.**), “Extreme Mass Ratio Inspirals triggered by Massive Black Hole Binaries: from Relativistic Dynamics to Cosmological Rates”, **MNRAS**, in press (2022).

2. Hammond, I. et al (including **Lodato, G.**), “External or internal companion exciting the spiral arms in CQ Tau?”, MNRAS, in press (2022).
3. Pirovano, L. M., Fedele, D., van Dishoeck, E. , Hogerheijde, M., **Lodato, G.**, Bruderer, S., “On the H₂O distribution in the disc of HD 100546 and HD 163296: the role of dust dynamics and planet-disc interaction”, A&A, in press (2022).
4. Curone, P. et al. (including **Lodato, G.**), “A giant planet shaping the disk around the very low mass star CIDA 1”, A&A, in press (2022).
5. Manara, C. F., Ansdell, M., Rosotti, G. P., Hughes, A. M., Armitage, P. J., **Lodato, G.**, Williams, J. P., “Demographics of young stars and their protoplanetary disks: lessons learned on disk evolution and its connection to planet formation”, Protostars & Planets VII, in press (2022).
6. Amaro-Seoane, P. et al (including **Lodato, G.**), “Astrophysics With the Laser Interferometer Space Antenna”, Living Reviews in Relativity, in press (2022).
7. Somigliana, A., et al (including **Lodato, G.**), “On the time evolution of M_d - M^* and M_{acc} - M^* correlations for protoplanetary discs: the viscous timescale increases with stellar mass”, MNRAS, 514, 5927 (2022).
8. Testi, L. et al (including **Lodato, G.**), “The protoplanetary disk population in L1688 and the time evolution of Class II YSOs”, A&A, 663, A98 (2022).
9. Rota, A.A., et al (including **Lodato, G.**), “Observational constraints on disc sizes in protoplanetary discs in multiple systems in the Taurus region. II. Gas disc sizes”, A&A, 662, A121 (2022).
10. Ceppi, S., Cuello, N., Lodato, G., C. J. Clarke, D. J. Price “Accretion rates in hierarchical triple systems with discs”, MNRAS, 514, 906 (2022).
11. Tiengo, A. et al (including **Lodato, G.**) “Recurrent X-ray flares of the black hole candidate in the globular cluster RZ 2109 in NGC 4472”, A&A, 661, A68 (2022).
12. Calcino, J. et al (including **Lodato, G.**), “Mapping the Planetary Wake in HD 163296 with Kinematics”, ApJ Letters, 929, L25 (2022).
13. Tabone et al (including **Lodato, G.**) “Secular evolution of MHD wind-driven discs: analytical solutions in the expanded α -framework”, MNRAS, 512, 2290 (2022).
14. Tabone, B., Rosotti, G., **Lodato, G.**, Armitage, P., Cridland, A., van Dishoeck, E. “MHD disc winds can reproduce fast disc dispersal and the correlation between accretion rate and disc mass in Lupus”, MNRAS Letters, 512, L74 (2022).
15. Pfister, H., *Toscani, M.*, Wong, T., Dai, L., **Lodato, G.** and Rossi. E., “Observable gravitational waves from tidal disruption events and their electromagnetic counterpart”, MNRAS, 510, 2025 (2022).
16. Terry, J et al (including **G. Lodato**) “Constraining protoplanetary disc mass using the GI wiggle”, MNRAS, 510, 1671 (2022).
17. *Toscani, M.*, **Lodato, G.** and Price, D. “Gravitational waves from tidal disruption events: an open and comprehensive catalogue”, MNRAS, 510, 992 (2022).
18. Longarini, C., **Lodato, G.** et al. “Investigating protoplanetary disc cooling through kinematics: analytical GI wiggle”, ApJ Letters, 920, L41 (2021).
19. Aly, H. et al (including **G. Lodato**) “Dust Traffic Jams in Inclined Circumbinary Protoplanetary Discs: Morphology and Formation Theory”, MNRAS, 508, 2743 (2021)
20. Burderi et al (including **G. Lodato**) “GrailQuest: hunting for Atoms of Space and Time hidden in the wrinkle of Space-Time “, Experimental Astronomy: Astrophysical Instrumentation and Methods, 51, 1255 (2021).

21. *Zagaria, F., Rosotti, G., Lodato, G.* "On dust evolution in planet-forming discs in binary systems. II – Comparison with Taurus and ρ Ophiuchus (sub-)millimetre observations: discs in binaries have small dust sizes", *MNRAS*, 507, 2531 (2021).
22. *Ragusa, E. et al (including Lodato, G.),* "Circumbinary and circumstellar discs around the eccentric binary IRAS 04158+2805 - a testbed for binary-disc interaction", *MNRAS*, 507, 1157 (2021).
23. *Toci, C., Rosotti, G., Lodato, G., Testi, L. Trapman, L.* "On the secular evolution of the ratio between gas and dust radii in protoplanetary discs: testing the efficiency of radial drift", *MNRAS*, 507, 818 (2021).
24. *Fedele, D., Toci, C., Maud, L. and Lodato, G.* "ALMA 870 micron continuum observations of HD 100546. Evidence of a giant planet on a wide orbit", *A&A*, 651, A90 (2021).
25. *Veronesi, B., Paneque-Carreno, T, Lodato, G. et al* "A dynamical measurement of the disk mass in Elias 2-27", *ApJ Letters*, 914, L27 (2021).
26. *Paneque-Carreno, T. et al (including G. Lodato)* "Spiral arm and non-Keplerian kinematics in Elias 2-27 - Possible evidence for gravitational instability", *ApJ*, 914, 88 (2021).
27. *Manara, C.F. et al (including Lodato, G.),* "PENELLOPE: the ESO data legacy program to complement the Hubble UV Legacy Library of Young Stars (ULLYSES) - I. Survey presentation and accretion properties of Orion OB1 and sigma-Orionis", *A&A*, 650, A196 (2021).
28. *Bollati, F., Lodato, G., Price, D. J., Pinte, C.* "The theory of kinks - A semi-analytical model of velocity perturbations due to planet-disc interaction", *MNRAS*, 504, 5444, 5454 (2021).
29. *Zagaria, F., Rosotti, G. and Lodato, G.* "On the evolution of dust grains in planet-forming discs in binary systems", *MNRAS*, 504, 2235 (2021).
30. *Zabludoff, A. et al (including Lodato, G.)* "Distinguishing Tidal Disruption Events from imposters", *Space Science Reviews*, 217, 54 (2021).
31. *Longarini, C. , Toci, C., Lodato, G., Aly, H.* "Dynamical dust traps in misaligned circumbinary discs", *MNRAS*, 503, 4930 (2021).
32. *Wolfer, L. et al (including G. Lodato)* "A highly non-Keplerian protoplanetary disc - Spiral structure in the gas disc of CQ Tau", *A&A*, 648, A19 (2021).
33. *Rossi, E. M., Stone, N. C., Law-Smith, J., MacLeod, M., Lodato, G., Dai, L., Mandel, I.,* "The process of stellar tidal disruption by supermassive black holes - The first pericenter passage", *Space Science Reviews*, 217, 40 (2021).
34. *Christianes, C. et al (including Lodato, G.)* "A faint companion around CrA-9: protoplanet or obscured binary?", *MNRAS*, 502, 6117 (2021).
35. *Dai, L., Lodato, G. and Cheng, R.* "The physics of accretion discs, winds and jets in Tidal Disruption Events", *Space Science Reviews*, 217, 12 (2021).
36. *Hall, C. et al (including Lodato, G.),* "Predicting the kinematic evidence for gravitational instability", *ApJ*, 904, 148 (2020).
37. *Fontecilla, C., Lodato, G. & Cuadra, J.* "Electromagnetic counterpart of adiabatic circumprimary discs in merging Supermassive Black Holes binaries", *MNRAS*, 499, 2836 (2020).
38. *Toci, C., Lodato, G., Christiaens, V., Fedele, D., Pinte, C., Price, D. J., Testi, L.* "Planet migration, resonant locking and accretion streams in PDS 70: Comparing models and data", *MNRAS*, 499, 2015 (2020).
39. *Toscani, M., Rossi, E. M., Lodato, G.,* "The gravitational wave background signal from tidal disruption events", *MNRAS*, 498, 507 (2020).

40. Long, F. et al (including **G. Lodato**), “Evidence of Dust Trapping in Ring-like Disks from ALMA Dual-wavelength Observations”, *ApJ*, 898, 36 (2020).
41. Krolik, J., Armitage, P., Jiang, Y. and **Lodato, G.** “Future Simulations of Tidal Disruption Events”, *Space Science Reviews*, 216, 88 (2020).
42. Keppler, M. et al (including **Lodato, G.**), “A gap, shadows, spirals, streamers: SPHERE observations of binary-disk interactions in GG Tau A”, *A&A*, 639, A62 (2020).
43. Manara, C. F. et al (including **Lodato, G.**), “An X-Shooter survey of accretion in the Upper Scorpius disk-bearing population reveals very high accretion rates in the late evolution of disks”, *A&A*, 639, A58 (2020).
44. Maureira, M. J., Pineda, J. E., Segura-Cox, D., Caselli, P., Testi, L., **Lodato, G.**, Loinard, L. and Hernandez-Gomez, A. “Orbital and mass constraints of the young binary system IRAS 16293-2422 A”, *ApJ*, 897, 59 (2020).
45. Robberto, M. et al (including **Lodato, G.**) “HST survey of the Orion Nebula Cluster in the H₂O 1.4 μ m absorption band: I. A census of substellar and planetary mass objects”, *ApJ*, 896, 79 (2020).
46. **Lodato, G.**, Bonnerot, C., Cheng, R. and Dai, L. “Simulations of Tidal Disruption Events”, *Space Science Reviews*, 216, 63 (2020).
47. Veronesi, B., Ragusa, E., Aly, H., **Lodato, G.**, Pinte, C., Price, D.J., Long, F. and Herczeg, G. “Is the gap in the DS Tau disc hiding a planet?”, *MNRAS*, 495, 1913 (2020).
48. Sacchi, A., **Lodato, G.**, Toci, C. and Motta, V., “What causes fragmentation in debris streams in TDEs?”, *MNRAS*, 495, 1227 (2020).
49. Ubeira Gabellini, M. G., Christiaens, V., **Lodato, G.**, van den Ancker, M., Fedele, M., Manara, C. F. and Price, D.J., “Discovery of a low-mass companion embedded in the disk of the young massive star MWC 297 with VLT/SPHERE”, *ApJ Letters*, 890, L8 (2020).
50. Aly, H. and **Lodato, G.** “Piling up the dust in misaligned circumbinary discs”, *MNRAS*, 492, 3306 (2020).
51. Scardoni, C., Rosotti, G., **Lodato, G.** & Clarke, C. J., “Type II migration strikes back — An old paradigm for planet migration in discs”, *MNRAS*, 492, 1318 (2020).
52. Somigliana, A., Toci, C., **Lodato, G.**, Rosotti, G. and Manara, C.F. “Effects of photoevaporation on protoplanetary disc isochrones”, *MNRAS*, 492, 1120 (2020).
53. Cuello et al. (including **Lodato, G.**) “Flybys in protoplanetary discs — II. Observational signatures”, *MNRAS*, 491, 504 (2020).
54. Toci, C., **Lodato, G.**, Fedele, D., Testi, L., Pinte, C. “Long lived dust rings around HD169142”, *ApJL*, 888, L4 (2019).
55. Manara, C. F., Mordasini, C., Testi, L., Williams, J. P., Miotello, A., **Lodato, G.** “Constraining disk evolution prescriptions of planet population synthesis models with observed disk masses and accretion rates”, *A&A Letters*, 631, 2 (2019).
56. Coughlin, E., Armitage, P., **Lodato, G.**, and Nixon, C. “The Influence of Black Hole Binarity on Tidal Disruption Events”, *Space Science Reviews*, 215, id. 45 (2019).
57. Veronesi, B., **Lodato, G.**, Dipierro, G., Ragusa, E., Hall, C. and Price, D. J., “Multi-wavelength observations of protoplanetary discs as a proxy for the gas disc mass”, *MNRAS*, 489, 3758 (2019).
58. Toscani, M., **Lodato, G.** and Nealon, R., “Gravitational wave emission during disc formation in tidal disruption events”, *MNRAS*, 489, 699 (2019).

59. Long, F. and others (including **Lodato, G.**) “Compact Disks in a High-Resolution ALMA Survey of Dust Substructures in Disks in the Taurus Molecular Cloud”, *ApJ*, 882, 49 (2019).
60. Manara, C., et al (including **Lodato, G.**) “Observational constraints on disk sizes in tidally truncated protoplanetary disks in multiple systems in the Taurus region”, *A&A*, 628, A95 (2019).
61. Rosotti, G., Booth, R., Tazzari, M., Clarke, C., **Lodato, G.**, Testi, L., “On the millimetre continuum flux-radius correlation of proto-planetary discs”, *MNRAS*, 486, L63 (2019).
62. Rosotti, G., Tazzari, M., Booth, R., Testi, L., **Lodato, G.**, Clarke, C., “The time evolution of dusty protoplanetary disc radii: observed and physical radii differ”, *MNRAS*, 486, 4829 (2019).
63. *Ubeira Gabellini, M. G.* and others (including **Lodato, G.**), “The gas and dust disk around the CQ Tau protostar”, *MNRAS*, 486, 4638 (2019).
64. *Sacchi, A.* and **Lodato, G.** “Failed tidal disruption events and X-ray flares from the Galactic Center”, *MNRAS*, 486, 1833 (2019).
65. **Lodato, G.**, and others “The newborn planet population emerging from ring-like structures in discs ”, *MNRAS*, 486, 453 (2019).
66. Mesa, D. and others (including **Lodato, G.**) “Exploring the R CrA environment with SPHERE: Discovery of a new companion”, *A&A*, 624, A4 (2019).
67. Liu, Y., Dipierro, G., Ragusa, E., **Lodato, G.** et al., “The ring structure in the MWC480 disk revealed by ALMA”, *A&A*, 622, A75 (2019).
68. Pereira, F., **Lodato, G.**, Rodrigues, I., Alves, M., Price, D.J., “Misaligned snowplough effect and the electromagnetic counterpart to black hole binary mergers”, *MNRAS*, 484, 31 (2019).
69. Pasham, D.R., Remillard, R.A., Fragile, P.C., *Franchini, A.*, Stone, N.C., **Lodato, G.** and others, “A remarkably loud quasi-periodicity after a star is disrupted by a massive black hole”, *Science*, 363, 531 (2019).
70. Long, F. et al (including **Lodato, G.**), “Gaps and rings in an ALMA survey of disks in the Taurus star-forming region”, *ApJ*, 869, 17 (2018).
71. Price, D. J. et al (including **Lodato, G.**), “Phantom: a smoothed particle hydrodynamics and magnetohydrodynamics code for astrophysics”, *Publications of the Astronomical Society of Australia*, 35, e031 (2018).
72. Aly, H., **Lodato, G.** and Cazzoletti, P., “On the secular evolution of GG Tau A circumbinary disc: A misaligned disc scenario ”, *MNRAS*, 480, 4738 (2018).
73. *Ballabio, G.*, Dipierro, G., *Veronesi, B.*, **Lodato, G.**, Hutchinson, M., Laibe, G. and Price, D., “Enforcing dust mass conservation in 3D simulations of tightly coupled grains with the Phantom SPH code”, *MNRAS*, 477, 2766 (2018).
74. Price, D. and others (including **Lodato, G.**), “Circumbinary, not transitional: On the spiral arms, cavity, shadows, fast radial flows, streamers and horseshoe in the HD142527 transition disc”, *MNRAS*, 477, 1270 (2018).
75. Q. Vigneron, **G. Lodato** & *A. Guidarelli*, “Tidal disruption of stars in a supermassive black hole binary system: the influence of orbital properties on fallback and accretion rates”, *MNRAS*, 476, 5312 (2018).
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Data

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