



# AI Integration into ESO Library **Fulltext Search (FUSE)** & **Telescope Bibliography (telbib)**

Enhancing ESO's Telescope Bibliography through Machine Learning

---

Mahmut Eren, Silvia Meakins, Uta Grothkopf, Leslie Kiefer

ESO Library, Documentation, and Information Services department

Based on the project completed by Claudio Urbina as a master thesis supervised by Amelia Bayo and Mauricio Cerda

LISA 10 | 4 November 2025





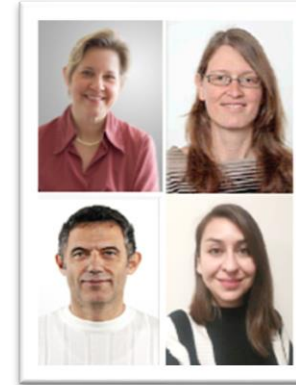
# Agenda

- **Introduction Telbib & FUSE**
- **Motivation for AI Integration?**
- **How AI Works in FUSE**
- **Model Performance**
- **Future Work**
- **Summary**

# ESO TELESCOPE BIBLIOGRAPHY

**telbib:** db of refereed papers that use ESO data

- **built and curated** by ESO Librarians
- **interlinks resources:** ESO data papers and the observations in the Science Archive, and to/from other resources
- **tool to evaluate** ESO's performance and impact through bibliometrics

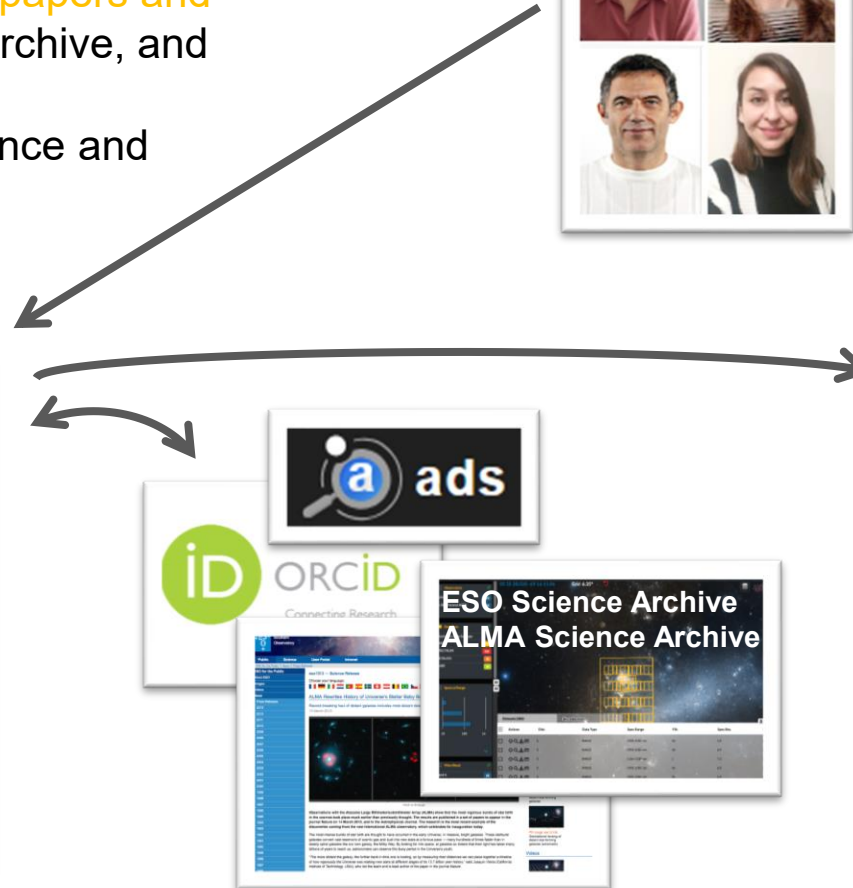
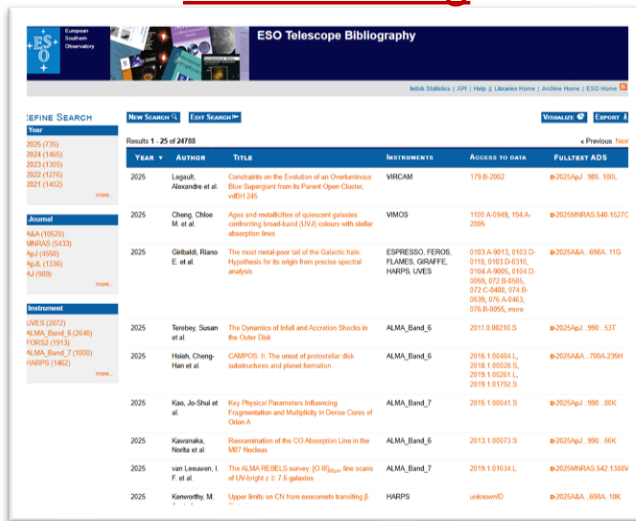


Coding / scripting

Data ingestion and curation

Strategic development

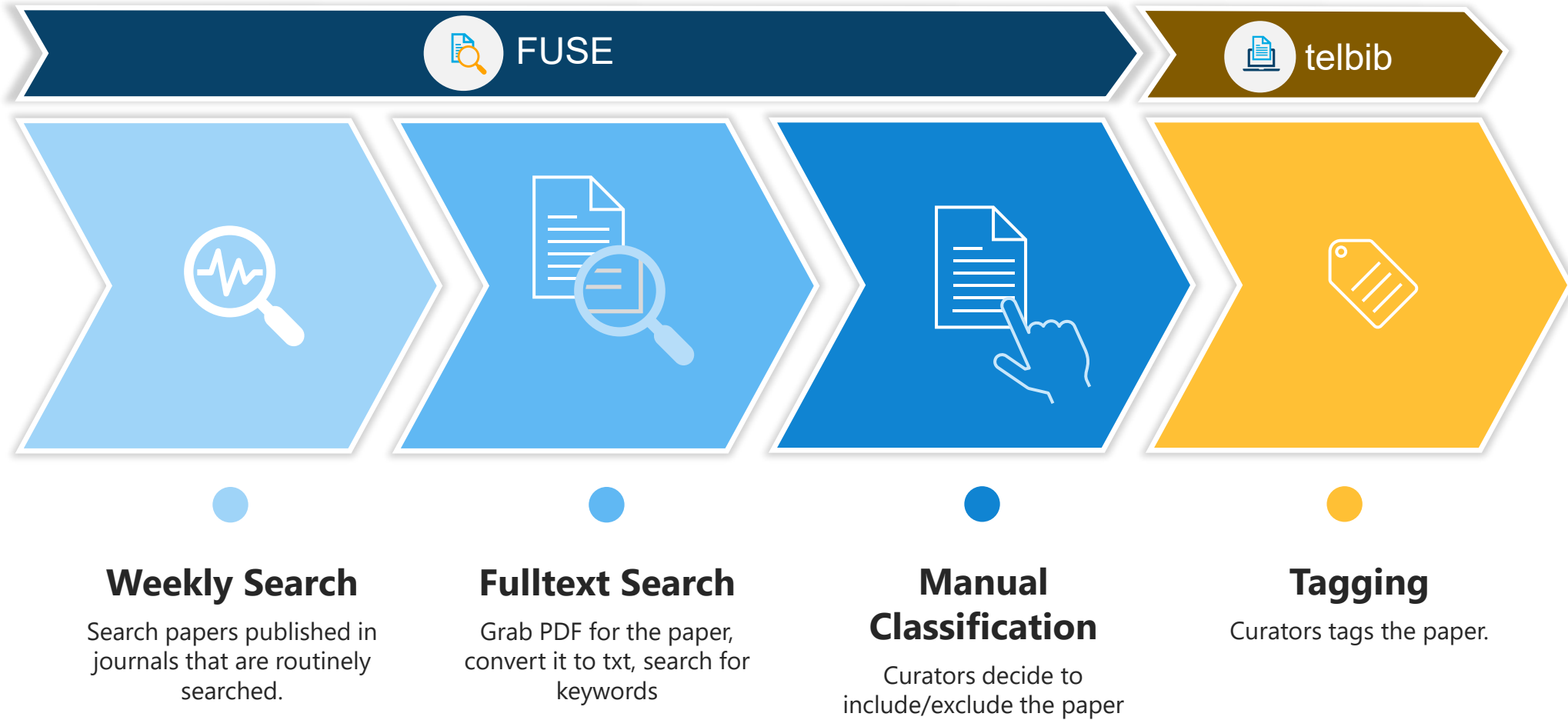
[telbib.eso.org](https://telbib.eso.org)




# Telbib Paper Identification Process



# Telbib Paper Identification Process



# FULLTEXT SEARCH TOOL - Keywords



FUSE on librarytools

**Queries**

- » Insert
- » Queue (20)

**Searches**

- » Searches
- » Search papers
- » Annual Searches

**Admin**

- » Journals
- » Displays
- » Stop Words
- » Keywords
- » ADS limit
- » Help

**Manuscripts**

- » Upload files

**Fulltext Keyword Lists**

**Add/Edit Keyword List**


Name:   or [Back to Keywords](#)

\* Search is case sensitive.

**Keywords**

<input checked="" type="checkbox"/> 1.1THz	<input checked="" type="checkbox"/> FORS	<input checked="" type="checkbox"/> MUSE	<input checked="" type="checkbox"/> Swedish ESO
<input checked="" type="checkbox"/> 10.18727	<input checked="" type="checkbox"/> FORS2-SPEC	<input checked="" type="checkbox"/> MW-BULGE	<input checked="" type="checkbox"/> Swiss
<input checked="" type="checkbox"/> 18727/archive	<input type="checkbox"/> FP7	<input checked="" type="checkbox"/> NACO	<input checked="" type="checkbox"/> TAROT
<input checked="" type="checkbox"/> 2.2ESO	<input checked="" type="checkbox"/> GaBoDS	<input checked="" type="checkbox"/> NaCo	<input checked="" type="checkbox"/> TBT
<input checked="" type="checkbox"/> 4LGSF	<input checked="" type="checkbox"/> Gaia-ESO	<input checked="" type="checkbox"/> NAOS	<input checked="" type="checkbox"/> Test-Bed Telescope
<input checked="" type="checkbox"/> 4MOST	<input checked="" type="checkbox"/> GaiaESO	<input checked="" type="checkbox"/> NaosConica	<input checked="" type="checkbox"/> TIMMI
<input checked="" type="checkbox"/> ADHOC	<input checked="" type="checkbox"/> GALACSI	<input checked="" type="checkbox"/> NEOSTEL	<input checked="" type="checkbox"/> TRAPPIST
<input checked="" type="checkbox"/> ADS/JAO	<input checked="" type="checkbox"/> GALACTICNUCLEUS	<input checked="" type="checkbox"/> nFLASH	<input checked="" type="checkbox"/> Trappist
<input checked="" type="checkbox"/> ALMA	<input checked="" type="checkbox"/> GASP	<input checked="" type="checkbox"/> NGTS	<input checked="" type="checkbox"/> Ultra-VISTA
<input checked="" type="checkbox"/> ALMA Calibrator	<input checked="" type="checkbox"/> GCAV	<input checked="" type="checkbox"/> NIRPS	<input checked="" type="checkbox"/> ULTRACAM
<input checked="" type="checkbox"/> ALMA calibrator	<input checked="" type="checkbox"/> GIRAFFE	<input checked="" type="checkbox"/> NTT	<input checked="" type="checkbox"/> Ultracam
<input checked="" type="checkbox"/> AMAZE	<input checked="" type="checkbox"/> Giraffe	<input checked="" type="checkbox"/> OmegaCAM	<input checked="" type="checkbox"/> UltraVISTA
<input checked="" type="checkbox"/> AMBER	<input checked="" type="checkbox"/> GMASS	<input checked="" type="checkbox"/> omegacam	<input checked="" type="checkbox"/> ULTRAVISTA
<input checked="" type="checkbox"/> AMBRE	<input type="checkbox"/> GOODS	<input checked="" type="checkbox"/> OMEGACAM	<input checked="" type="checkbox"/> ULTRAVISTA+
<input checked="" type="checkbox"/> APEX	<input checked="" type="checkbox"/> GRAVITY	<input checked="" type="checkbox"/> omegacam	<input checked="" type="checkbox"/> UVES
<input checked="" type="checkbox"/> artemis	<input checked="" type="checkbox"/> GRAVITY	<input checked="" type="checkbox"/> Organization for Astronomical	<input checked="" type="checkbox"/> Uves
<input checked="" type="checkbox"/> Artemis	<input checked="" type="checkbox"/> GROND	<input checked="" type="checkbox"/> OSIRIS	<input checked="" type="checkbox"/> UVES-POP
<input checked="" type="checkbox"/> ARTEMIS	<input checked="" type="checkbox"/> GW170817	<input checked="" type="checkbox"/> P-ARTEMIS	<input checked="" type="checkbox"/> VANDELS
<input checked="" type="checkbox"/> ATLAS	<input type="checkbox"/> H2020	<input checked="" type="checkbox"/> P-artemis	<input checked="" type="checkbox"/> VEGAS
<input checked="" type="checkbox"/> ATLASGAL	<input checked="" type="checkbox"/> HARPS	<input checked="" type="checkbox"/> Paranal	<input checked="" type="checkbox"/> VEILS
<input checked="" type="checkbox"/> BlackGEM	<input checked="" type="checkbox"/> Harps	<input checked="" type="checkbox"/> PESSTO	<input checked="" type="checkbox"/> Very Large Telescope
<input checked="" type="checkbox"/> CanariCam	<input checked="" type="checkbox"/> HAWK-I	<input checked="" type="checkbox"/> PHANGS	<input checked="" type="checkbox"/> VEXAS
<input checked="" type="checkbox"/> Canaricam	<input checked="" type="checkbox"/> Hawk-I	<input checked="" type="checkbox"/> PI230	<input checked="" type="checkbox"/> VHS
<input checked="" type="checkbox"/> Chajnantor	<input checked="" type="checkbox"/> HAWKI	<input checked="" type="checkbox"/> PIONIER	<input checked="" type="checkbox"/> VIDEO
<input checked="" type="checkbox"/> CHAMP	<input checked="" type="checkbox"/> HiRISE	<input checked="" type="checkbox"/> Pionier	<input checked="" type="checkbox"/> VIKING

# FULLTEXT SEARCH TOOL - Keywords



FUSE on librarytools

**Queries**

- » Insert
- » Queue (20)

**Searches**

- » Searches
- » Search papers
- » Annual Searches

**Admin**

- » Journals
- » Displays
- » Stop Words
- » Keywords
- » ADS limit
- » Help

**Manuscripts**

- » Upload files

**Fulltext Keyword Lists**

**Add/Edit Keyword List**

Name:   or [Back to Keywords](#)

\* Search is case sensitive.

**Keywords**

<input checked="" type="checkbox"/> 1.1THz	<input checked="" type="checkbox"/> FORS	<input checked="" type="checkbox"/> MUSE	<input checked="" type="checkbox"/> Swedish ESO
<input checked="" type="checkbox"/> 10.18727	<input checked="" type="checkbox"/> FORS2-SPEC	<input checked="" type="checkbox"/> MW-BULGE	<input checked="" type="checkbox"/> Swiss
<input checked="" type="checkbox"/> 18727/archive	<input type="checkbox"/> FP7	<input checked="" type="checkbox"/> NACO	<input checked="" type="checkbox"/> TAROT
<input checked="" type="checkbox"/> 2.2ESO	<input checked="" type="checkbox"/> GaBoDS	<input checked="" type="checkbox"/> NaCo	<input checked="" type="checkbox"/> TBT
<input checked="" type="checkbox"/> 4LGSF	<input checked="" type="checkbox"/> Gaia-ESO	<input checked="" type="checkbox"/> NAOS	<input checked="" type="checkbox"/> Test-Bed Telescope
<input checked="" type="checkbox"/> 4MOST	<input checked="" type="checkbox"/> GaiaESO	<input checked="" type="checkbox"/> NaosConica	<input checked="" type="checkbox"/> TIMMI
<input checked="" type="checkbox"/> ADHOC	<input checked="" type="checkbox"/> GALACSI	<input checked="" type="checkbox"/> NEOSTEL	<input checked="" type="checkbox"/> TRAPPIST
<input checked="" type="checkbox"/> ADS/JAO	<input checked="" type="checkbox"/> GALACTICNUCLEUS	<input checked="" type="checkbox"/> nFLASH	<input checked="" type="checkbox"/> Trappist
<input checked="" type="checkbox"/> ALMA	<input checked="" type="checkbox"/> GASP	<input checked="" type="checkbox"/> NGTS	<input checked="" type="checkbox"/> Ultra-VISTA
<input checked="" type="checkbox"/> ALMA Calibrator	<input checked="" type="checkbox"/> GCAV	<input checked="" type="checkbox"/> NIRPS	<input checked="" type="checkbox"/> ULTRACAM
<input checked="" type="checkbox"/> ALMA calibrator	<input checked="" type="checkbox"/> GIRAFFE	<input checked="" type="checkbox"/> NTT	<input checked="" type="checkbox"/> Ultracam
<input checked="" type="checkbox"/> AMAZE	<input checked="" type="checkbox"/> Giraffe	<input checked="" type="checkbox"/> OmegaCAM	<input checked="" type="checkbox"/> UltraVISTA
<input checked="" type="checkbox"/> AMBER	<input checked="" type="checkbox"/> GMASS	<input checked="" type="checkbox"/> omegacam	<input checked="" type="checkbox"/> ULTRAVISTA
<input checked="" type="checkbox"/> AMBRE	<input type="checkbox"/> GOODS	<input checked="" type="checkbox"/> OMEGACAM	<input checked="" type="checkbox"/> ULTRAVISTA+
<input checked="" type="checkbox"/> APEX	<input checked="" type="checkbox"/> GRAVITY	<input checked="" type="checkbox"/> omegacam	<input checked="" type="checkbox"/> UVES
<input checked="" type="checkbox"/> artemis	<input checked="" type="checkbox"/> GRAVITY	<input checked="" type="checkbox"/> Organization for Astronomical	<input checked="" type="checkbox"/> Uves
<input checked="" type="checkbox"/> Artemis	<input checked="" type="checkbox"/> GROND	<input checked="" type="checkbox"/> OSIRIS	<input checked="" type="checkbox"/> UVES-POP
<input checked="" type="checkbox"/> ARTEMIS	<input checked="" type="checkbox"/> GW170817	<input checked="" type="checkbox"/> P-ARTEMIS	<input checked="" type="checkbox"/> VANDELS
<input checked="" type="checkbox"/> ATLAS	<input type="checkbox"/> H2020	<input checked="" type="checkbox"/> P-artemis	<input checked="" type="checkbox"/> VEGAS
<input checked="" type="checkbox"/> ATLASGAL	<input checked="" type="checkbox"/> HARPS	<input checked="" type="checkbox"/> Paranal	<input checked="" type="checkbox"/> VEILS
<input checked="" type="checkbox"/> BlackGEM	<input checked="" type="checkbox"/> Harps	<input checked="" type="checkbox"/> PESSTO	<input checked="" type="checkbox"/> Very Large Telescope
<input checked="" type="checkbox"/> CanariCam	<input checked="" type="checkbox"/> HAWK-I	<input checked="" type="checkbox"/> PHANGS	<input checked="" type="checkbox"/> VEXAS
<input checked="" type="checkbox"/> Canaricam	<input checked="" type="checkbox"/> Hawk-I	<input checked="" type="checkbox"/> PI230	<input checked="" type="checkbox"/> VHS
<input checked="" type="checkbox"/> Chajnantor	<input checked="" type="checkbox"/> HAWKI	<input checked="" type="checkbox"/> PIONIER	<input checked="" type="checkbox"/> VIDEO
<input checked="" type="checkbox"/> CHAMP	<input checked="" type="checkbox"/> HiRISE	<input checked="" type="checkbox"/> Pionier	<input checked="" type="checkbox"/> VIKING


Includes telescopes, instruments, surveys

Case-sensitive with regex support

Automatically identify candidate ESO papers

Curators maintain and expand

# FULLTEXT SEARCH TOOL



FUSE on librarytools

**Queries**

- » Insert
- » Queue (20)

**Searches**

- » Searches
- » Search papers
- » Annual Searches

**Admin**

- » Journals
- » Displays
- » Stop Words
- » Keywords
- » ADS limit
- » Help

**Manuscripts**

- » Upload files

**Current Query #5627**

User: automatic  
Query Date: 2025-06-25 13:47:34  
Journals Searched: A&A, AJ, ApJ, ApJS, ApJL, AN, EM&P, Icar, MNRAS, Natur, NewA, NewAR, PASP, P&SS, Sci  
Query Link: [https://ui.adsabs.harvard.edu/#search/q=database:\(...](https://ui.adsabs.harvard.edu/#search/q=database:(...)  
Dates Searched: 2025-06-05 - 2025-06-13  
Notes:  
Keywordlist: ESO keywords  
Records Searched: 1  
Keywords found: 26  
[View Search Log](#)

Go to: **ALMA papers (0)** | **Survey papers (0)** | **ProID papers (1)** | **Others (0)** || Filter:

|  |  |  || Export Records


» Fulltext Search with AI      » Fulltext Search without AI      » Fulltext Search with AI      » Fulltext Search without AI      » AI Classification


ID#	Status	Search	Record/Keyword(s)	Type	LookInside	Online	AI	Delete
648409	Included Pending		<p>2025A&amp;A...698A..91V  Viscasillas Vázquez, C.  <b>The Galactic inner spiral arms revealed by the Gaia ESO Survey chemical abundances: Metallicity and [Mg/Fe] ratios</b>  Astronomy &amp; Astrophysics, Volume 698, id.A91, 7 pp.</p> <p><b>Found Keywords:</b> ESO, Gaia-ESO, GIRAFFE, Paranal, ProgramID, Silla, UVES, Visual Echelle  <b>Keyword categories:</b> ESOProID, ESO instruments, Surveys, Staff, others</p> <p>"B-3002, <b>193.B-0936</b>, and 1"  "grammes <b>188.B-3002</b>, 193.B"  "36, and <b>197.B-1074</b> .Refere"  "ile the faintest ones were reached with <b>GIRAFFE</b> . We computed ages of MSTO field stars using the"  " stars (â¼¼73% of them were observed with <b>GIRAFFE</b> HR10 and/or HR21 setups and â¼¼27% with UVES U580"  "BL. These stars were observed with both <b>GIRAFFE</b> (Grating Instrument for Radiation Analysis with"  " the brightest stars were observed with <b>UVES</b> , while the faintest ones were reached with <b>GIRAFFE</b>"</p>	ESData	648409.txt	Publ. PDF arxiv PDF	<span style="color: green;">●</span> <span style="color: red;">●</span>	<input type="checkbox"/> del






# FULLTEXT SEARCH TOOL


  
fulltext search

Queries 


- » Insert
- » Queue (20)

Searches 

- » Searches
- » Search papers
- » Annual Searches

Admin 

- » Journals
- » Displays
- » Stop Words
- » Keywords
- » ADS limit
- » Help

Manuscripts 

- » Upload files

Current Query #5627

User: automatic  
Query Date: 2025-06-25 13:47:34

Journals Searched: A&A, AJ, ApJ, ApJS, ApJL, AN, EM&P, Icar, MNRAS, Natur, NewA, NewAR, PASP, P&SS, Sci

Query Link: [https://ui.adsabs.harvard.edu/#search/q=database:\(...](https://ui.adsabs.harvard.edu/#search/q=database:(...)

Dates Searched: 2025-06-05 - 2025-06-13

Keywords found: 20

[View Search Log](#)

Go to: ALMA papers (0) | Survey papers (0) | ProID papers (1) | Others (0) || Filter:

|  |  |  || Export Records


» Fulltext Search with AI

» Fulltext Search without AI


» Fulltext arxiv Search with AI

» Fulltext arxiv Search without AI

» AI Classification

ID#	Status	Search	Record/Keyword(s)	Type	LookInside	Online
648409	 Included Pending		2025A&A...698A..91V Viscasillas Vázquez, C. The Galactic inner spiral arms revealed by the Gaia ESO Survey chemical abundances: Metallicity and [Mg/Fe] ratios Astronomy & Astrophysics, Volume 698, id.A91, 7 pp.  Found Keywords: ESO, Gaia-ESO, GIRAFFE, Paranal, ProgramID, Silla, UVES, Visual Echelle Keyword categories: ESOProID, ESO instruments, Surveys, Staff, others	ESOData	648409.txt	Publ. arxiv

# FULLTEXT SEARCH TOOL



FUSE on librarytools

**Queries**

- » Insert
- » Queue (20)

**Searches**

- » Searches
- » Search papers
- » Annual Searches

**Admin**

- » Journals
- » Displays
- » Stop Words
- » Keywords
- » ADS limit
- » Help

**Manuscripts**

- » Upload files




**Current Query #5627**

User: automatic  
Query Date: 2025-06-25 13:47:34  
Journals Searched: A&A, AJ, ApJ, ApJS, ApJL, AN, EM&P, Icar, MNRAS, Natur, NewA, NewAR, PASP, P&SS, Sci  
Query Link: [https://ui.adsabs.harvard.edu/#search/q=database:\(...](https://ui.adsabs.harvard.edu/#search/q=database:(...)  
Dates Searched: 2025-06-05 - 2025-06-13  
Notes:  
Keywordlist: ESO keywords  
Records Searched: 1  
Keywords found: 26  
[View Search Log](#)




Go to: **ALMA papers (0)** | **Survey papers (0)** | **ProID papers (1)** | **Others (0)** || Filter:

|  |  |  || Export Records




» Fulltext Search with AI      » Fulltext Search without AI      » Fulltext Search with AI      » Fulltext Search without AI      » AI Classification

ID#	Status	Search	Record/Keyword(s)	Type	LookInside	Online	AI	Delete
648409		Included Pending	<p>2025A&amp;A...698A..91V</p> <p>Viscasillas Vázquez, C.</p> <p><b>The Galactic inner spiral arms revealed by the Gaia ESO Survey chemical abundances: Metallicity and [Mg/Fe] ratios</b></p> <p>Astronomy &amp; Astrophysics, Volume 698, id.A91, 7 pp.</p> <p><b>Found Keywords:</b> ESO, Gaia-ESO, GIRAFFE, Paranal, ProgramID, Silla, UVES, Visual Echelle</p> <p><b>Keyword categories:</b> ESOProID, ESO instruments, Surveys, Staff, others</p> <p>"B-3002, <b>193.B-0936</b>, and 1"</p> <p>"grammes <b>188.B-3002</b>, 193.B"</p> <p>"36, and <b>197.B-1074</b>. Refere"</p> <p>"ile the faintest ones were reached with <b>GIRAFFE</b>. We computed ages of MSTO field stars using the"</p> <p>"stars (≈ 1473% of them were observed with <b>GIRAFFE</b> HR10 and/or HR21 setups and ≈ 1427% with UVES U580"</p> <p>"BL. These stars were observed with both <b>GIRAFFE</b> (Grating Instrument for Radiation Analysis with"</p> <p>"the brightest stars were observed with <b>UVES</b>, while the faintest ones were reached with <b>GIRAFFE</b>"</p>	ESData	648409.txt	Publ. PDF arxiv PDF	 	<input type="checkbox"/> del




# FULLTEXT SEARCH TOOL

ID#	Status	Search	Record/Keyword(s)	Type	LookInside	Online	AI	Delete
648409		Included Pending	<p>2025A&amp;A...698A..91V  Viscasillas Vázquez, C.  <b>The Galactic inner spiral arms revealed by the Gaia ESO Survey chemical abundances: Metallicity and [Mg/Fe] ratios</b>  Astronomy &amp; Astrophysics, Volume 698, id.A91, 7 pp.</p> <p><b>Found Keywords:</b> ESO, Gaia-ESO, GIRAFFE, Paranal, ProgramID, Silla, UVES, Visual Echelle  <b>Keyword categories:</b> ESOProID, ESO instruments, Surveys, Staff, others</p> <p>"B-3002, 193.B-0936 , and 1"  "grammes 188.B-3002 , 193.B"  "36, and 197.B-1074 .Refere"  "ile the faintest ones were reached with <b>GIRAFFE</b> . We computed ages of MSTO field stars using the"  " stars (â¼¼73% of them were observed with <b>GIRAFFE</b> HR10 and/or HR21 setups and â¼¼27% with <b>UVES</b> U580"  "BL. These stars were observed with both <b>GIRAFFE</b> (Grating Instrument for Radiation Analysis with"  " the brightest stars were observed with <b>UVES</b> , while the faintest ones were reached with <b>GIRAFFE</b>"</p>	ESOData	648409.txt	Publ. PDF arxiv PDF	 	<input type="checkbox"/> del

# FULLTEXT SEARCH TOOL

ID#	Status	Search	Record/Keyword(s)	Type	LookInside	Online	AI	Delete
648409		Included Pending	<p>2025A&amp;A...698A..91V  Viscasillas Vázquez, C.  The Galactic inner spiral arms revealed by the Gaia ESO Survey chemical abundances: Metallicity and [Mg/Fe] ratios  Astronomy &amp; Astrophysics, Volume 698, id.A91, 7 pp.</p> <p><b>Found Keywords:</b> ESO, Gaia-ESO, GIRAFFE, Paranal, ProgramID, Silla, UVES, Visual Echelle  <b>Keyword categories:</b> ESOProID, ESO instruments, Surveys, Staff, others</p> <p>Found keywords</p> <p>"36, and 197.8-1074 .Refere"  "ile the faintest ones were reached with <b>GIRAFFE</b> . We computed ages of MSTO field stars using the"  " stars (â¼¼ ¼73% of them were observed with <b>GIRAFFE</b> HR10 and/or HR21 setups and â¼¼ ¼27% with <b>UVES</b> U580"  "BL. These stars were observed with both <b>GIRAFFE</b> (Grating Instrument for Radiation Analysis with"  " the brightest stars were observed with <b>UVES</b> , while the faintest ones were reached with <b>GIRAFFE</b>"</p>	ESOData	648409.txt	Publ. PDF arxiv PDF	 	<input type="checkbox"/> del

# FULLTEXT SEARCH TOOL




ID#	Status	Search	Record/Keyword(s)	Type	LookInside	Online	AI	Delete
648409		Included Pending	<p>2025A&amp;A...698A..91V  Viscasillas Vázquez, C.  The Galactic inner spiral arms revealed by the Gaia ESO Survey chemical abundances: Metallicity and [Mg/Fe] ratios  Astronomy &amp; Astrophysics, Volume 698, id.A91, 7 pp.</p> <p>Found Keywords: ESO, Gaia-ESO, GIRAFFE, Paranal, ProgramID, Silla, UVES, Visual Echelle  Keyword categories: ESOProID, ESO instruments, Surveys, Staff, others</p> <p>"B-3002, 193.B-0936 , and 1"  "grammes 188.B-3002 , 193.B"  "36, and 197.B-1074 .Refere"</p>	ESOData	648409.txt	Publ. PDF arxiv PDF	 	<input type="checkbox"/> del

Program IDs/Data DOIs

Found keywords



# FULLTEXT SEARCH TOOL




ID#	Status	Search	Record/Keyword(s)	Type	LookInside	Online	AI	Delete
648409		Included Pending	<p>2025A&amp;A...698A..91V  Viscasillas Vázquez, C.  The Galactic inner spiral arms revealed by the Gaia ESO Survey chemical abundances: Metallicity and [Mg/Fe] ratios  Astronomy &amp; Astrophysics, Volume 698, id.A91, 7 pp.</p> <p><b>Found Keywords:</b> ESO, Gaia-ESO, GIRAFFE, Paranal, ProgramID, Silla, UVES, Visual Echelle  <b>Keyword categories:</b> ESOProID, ESO instruments, Surveys, Staff, others</p> <p>"B-3002, 193.B-0936 ,  "grammes 188.B-3002  "36, and 197.B-1074 .Rerere  "ile the faintest ones were reached with <b>GIRAFFE</b> . We computed ages of MSTO field stars using the"  " stars (â ¼73% of them were observed with <b>GIRAFFE</b> HR10 and/or HR21 setups and â ¼27% with UVES U580"  "BL. These stars were observed with both <b>GIRAFFE</b> (Grating Instrument for Radiation Analysis with"  " the brightest stars were observed with <b>UVES</b> , while the faintest ones were reached with GIRAFFE"</p>	ESOData	648409.txt	Publ. PDF arxiv PDF	 	<input type="checkbox"/> del

ESO instruments, survey names, etc.,

Found keywords

Program IDs/Data DOIs

# FULLTEXT SEARCH TOOL

ID#	Status	Search	Record/Keyword(s)	Type	LookInside	Online	AI	Delete
648409		Included Pending	<p>2025A&amp;A...698A..91V  Viscasillas Vázquez, C.  The Galactic inner spiral arms revealed by the Gaia ESO Survey chemical abundances: Metallicity and [Mg/Fe] ratios  Astronomy &amp; Astrophysics, Volume 698, id.A91, 7 pp.</p> <p><b>Found Keywords:</b> ESO, Gaia-ESO, GIRAFFE, Paranal, ProgramID, Silla, UVES, Visual Echelle  <b>Keyword categories:</b> ESOProID, ESO instruments, Surveys, Staff, others</p> <p>"B-3002, 193.B-0936 , and 1"  "grammes 188.B-3002 , 193.B"  "36, and 197.B-1074 .Refere"  "ile the faintest ones were reached with <b>GIRAFFE</b> . We computed ages of MSTO field stars using the"  " stars (â¼¼73% of them were observed with <b>GIRAFFE</b> HR10 and/or HR21 setups and â¼¼27% with <b>UVES</b> U580"  "BL. These stars were observed with both <b>GIRAFFE</b> (Grating Instrument for Radiation Analysis with"  " the brightest stars were observed with <b>UVES</b> , while the faintest ones were reached with <b>GIRAFFE</b>"</p>	ESOData	648409.txt	Publ. PDF arxiv PDF	 	<input type="checkbox"/> del




Direct access to paper content

Found keywords

Program IDs/Data DOIs

ESO instruments, survey names, etc.,

# FULLTEXT SEARCH TOOL

ID#	Status	Search	Record/Keyword(s)	Type	LookInside	Online	AI	Delete
648409		Included Pending	<p>2025A&amp;A...698A..91V  Viscasillas Vázquez, C.  <b>The Galactic inner spiral arms revealed by the Gaia ESO Survey chemical abundances: Metallicity and [Mg/Fe] ratios</b>  Astronomy &amp; Astrophysics, Volume 698, id.A91, 7 pp.</p> <p><b>Found Keywords:</b> ESO, Gaia-ESO, GIRAFFE, Paranal, ProgramID, Silla, UVES, Visual Echelle  <b>Keyword categories:</b> ESOProID, ESO instruments, Surveys, Staff, others</p> <p>"B-3002, 193.B-0936 , and 1"  "grammes 188.B-3002 , 193.B"  "36, and 197.B-1074 .Refere"  "ile the faintest ones were reached with <b>GIRAFFE</b> . We computed ages of MSTO field stars using the"  " stars (â¼¼73% of them were observed with <b>GIRAFFE</b> HR10 and/or HR21 setups and â¼¼27% with <b>UVES</b> U580"  "BL. These stars were observed with both <b>GIRAFFE</b> (Grating Instrument for Radiation Analysis with"  " the brightest stars were observed with <b>UVES</b> , while the faintest ones were reached with <b>GIRAFFE</b>"</p>	ESOData	648409.txt	Publ. PDF arxiv PDF	 	<input type="checkbox"/> del

Found keywords


Program IDs/Data DOIs

ESO instruments, survey names, etc.,

Direct access to paper content



# FULLTEXT SEARCH TOOL

ID#	Status	Search	Record/Keyword(s)	Type	LookInside	Online	AI	Delete
648409	Included Pending		2025A&A...698A..91V Viscasillas Vázquez, C. The Galactic inner spiral arms revealed by the Gaia ESO Survey chemical	ESOData	648409.txt	Publ. PDF arxiv PDF		<input type="checkbox"/> del



Papers that

- partly or exclusively **use ESO data** (proprietary or archival)



Papers that

- quote** results from literature
- mention **ongoing** projects
- suggest **future observations**
- describe **instrumentation / software**
- develop **models** or run **simulations** merely as examples or for training (e.g., Machine Learning)
- use images only as **visual reference**

[http://www.eso.org/sci/libraries/telbib\\_methodology.html](http://www.eso.org/sci/libraries/telbib_methodology.html)

Program IDs/Data DOIs

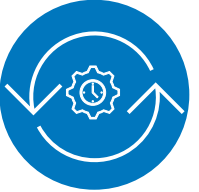
ESO instruments, survey names, etc.,

Direct access to paper content

# Motivation for AI Integration



Enabling more efficient workflow as number of publications and ESO facilities are increasing



Need for consistent classification of ESO data papers

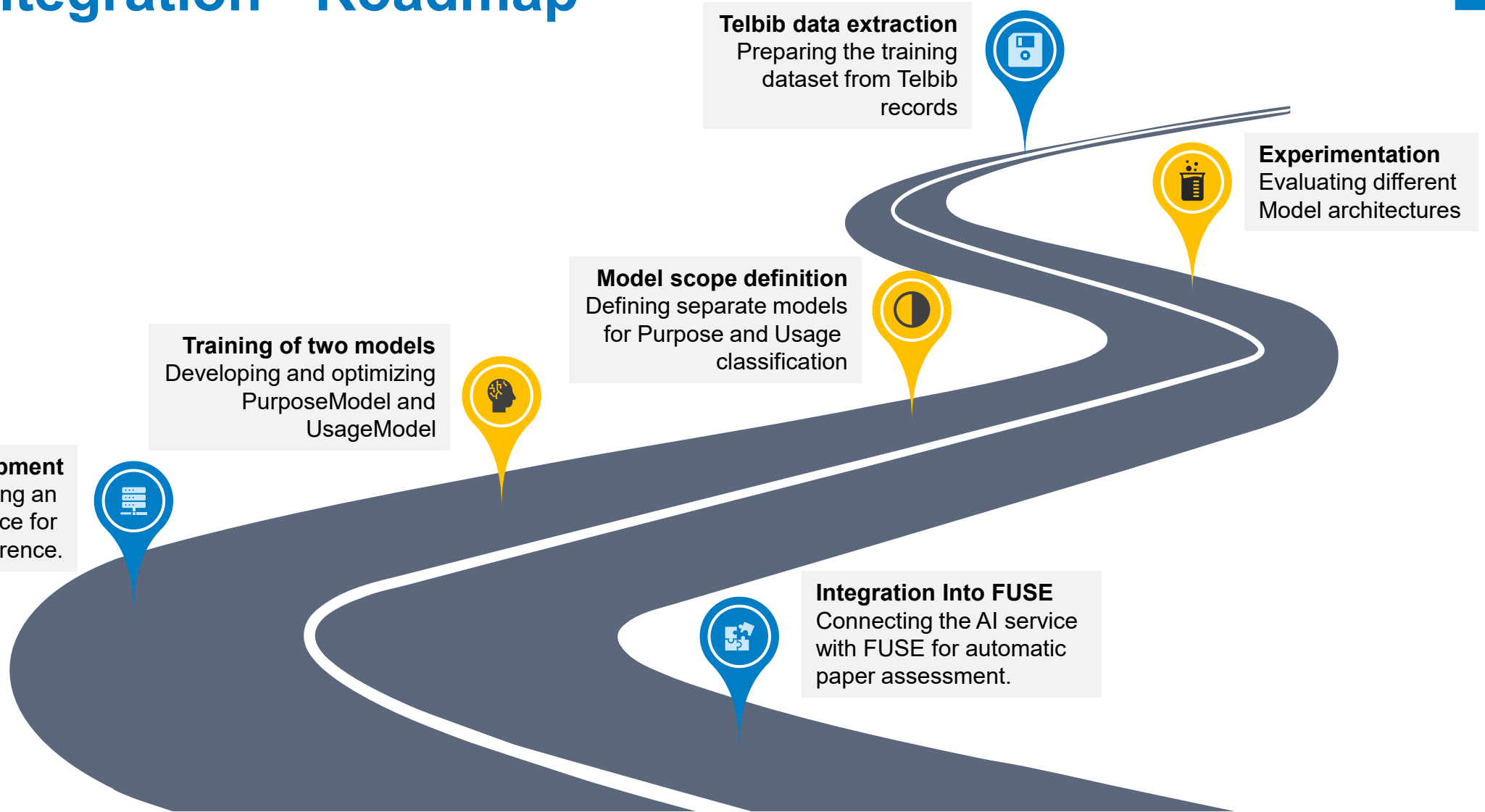


Simplified onboarding for new curators and contributors



- Claudio Urbina (thesis)
- Amelia Bayo, ESO
- Mauricio Cerda, Univ. Chile
- ESO curators

# AI Integration - Roadmap



# AI Models



## Purpose Model

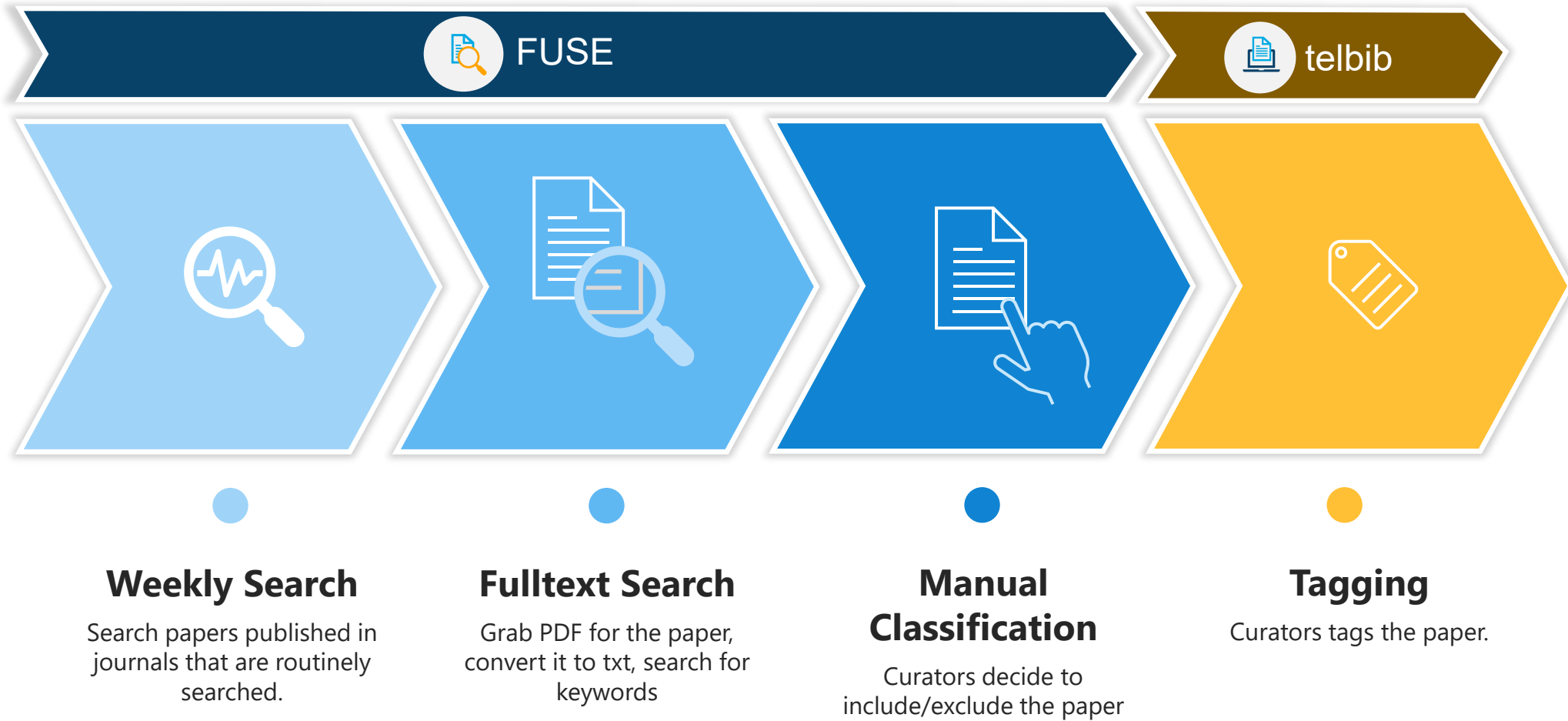
- Trained with paper abstracts
- Classify scientific vs. non-scientific



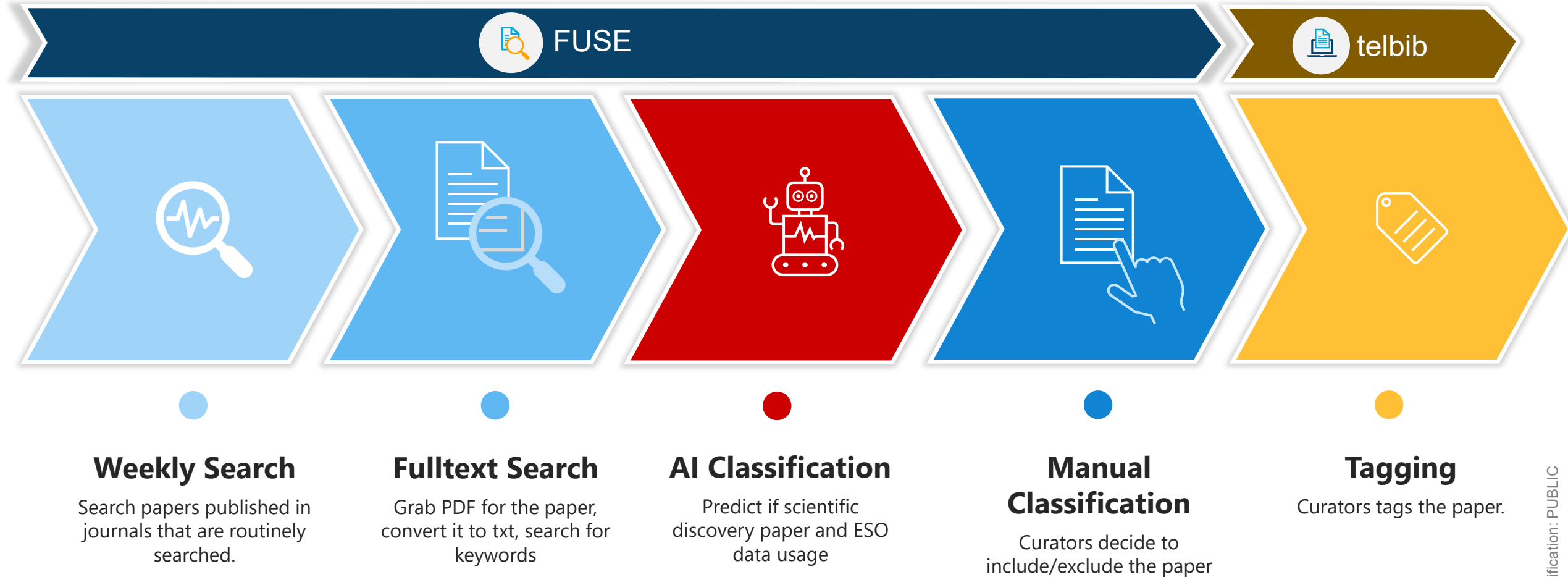
## Usage Model

- Trained with paper sentences with ESO keywords
- Detect ESO observational data usage

# Telbib Paper Identification Process



# Telbib Paper Identification Process





# FULLTEXT SEARCH TOOL

ID#	Status	Search	Record/Keyword(s)	Type	LookInside	Online	AI	Delete
648409		Included Pending	<p>2025A&amp;A...698A..91V  Viscasillas Vázquez, C.  <b>The Galactic inner spiral arms revealed by the Gaia ESO Survey chemical abundances: Metallicity and [Mg/Fe] ratios</b>  Astronomy &amp; Astrophysics, Volume 698, id.A91, 7 pp.</p> <p><b>Found Keywords:</b> ESO, Gaia-ESO, GIRAFFE, Paranal, ProgramID, Silla, UVES, Visual Echelle  <b>Keyword categories:</b> ESOProID, ESO instruments, Surveys, Staff, others</p> <p>"B-3002, 193.B-0936 , and 1"  "grammes 188.B-3002 , 193.B"  "36, and 197.B-1074 .Refere"  "ile the faintest ones were reached with <b>GIRAFFE</b> . We computed ages of MSTO field stars using the"  " stars (â¼¼73% of them were observed with <b>GIRAFFE</b> HR10 and/or HR21 setups and â¼¼27% with <b>UVES</b> U580"  "BL. These stars were observed with both <b>GIRAFFE</b> (Grating Instrument for Radiation Analysis with"  " the brightest stars were observed with <b>UVES</b> , while the faintest ones were reached with <b>GIRAFFE</b>"</p>	ESOData	648409.txt	Publ. PDF arxiv PDF	 	<input type="checkbox"/> del

# FULLTEXT SEARCH TOOL

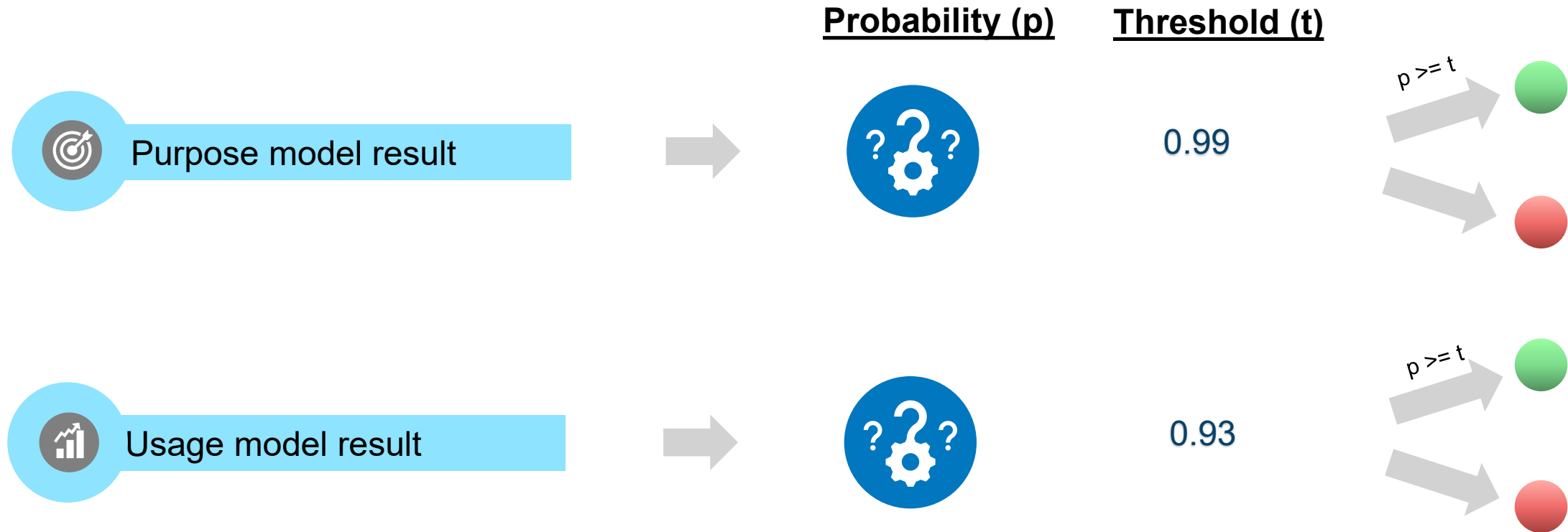
	Type	LookInside	Online	AI	Delete
<p>id(s)</p> <p>..91V</p> <p>z, C.</p> <p>er spiral arms revealed by the Gaia ESO Survey chemical tallicity and [Mg/Fe] ratios</p> <p>ophysics, Volume 698, id.A91, 7 pp.</p> <p>s: ESO, Gaia-ESO, GIRAFFE, Paranal, ProgramID, Silla, UVES,</p> <p>ries: ESOProID, ESO instruments, Surveys, Staff, others</p> <p>0936 , and 1"</p> <p>-3002 , 193.B"</p> <p>074 .Refere"</p> <p>nes were reached with <b>GIRAFFE</b> . We computed ages of MSTO he"</p> <p>of them were observed with <b>GIRAFFE</b> HR10 and/or HR21</p> <p>7% with UVES U580"</p> <p>ere observed with both <b>GIRAFFE</b> (Grating Instrument for s with"</p> <p>rs were observed with <b>UVES</b> , while the faintest ones were AFFE"</p>	ESOData	648409.txt	Publ. PDF arxiv PDF	<div> <div></div> <div></div> </div>	<input type="checkbox"/> del

 Purpose model result

 Usage model result



# FUSE + AI Interface: Model Threshold Values



# FUSE + AI Interface: Purpose Model Result

Purpose Model
×

Are the observations used to achieve new scientific conclusions??

Abstract Chunks	Probability	Scale	Feedback
<p>A quadruply lensed source, J125856.3-031944, has been discovered using the DELVE survey and Wide-field Infrared Survey Explorer W1-W2 colors. Follow-up direct imaging carried out with the Magellan Baade 6.5 m telescope is analyzed, as is spectroscopy from the 2.5 m Nordic Optical Telescope. The lensed image configuration is kite-like, with the major axis of the lensing galaxy along the symmetry axis of the kite, and with the faintest image at its tail. Redward of 6000 Å, the tail image is strongly blended with the lensing galaxy. The Sloan g direct imaging carried out with Magellan permits deblending. As the lensed image configuration is nearly circular, simple models give high predicted magnifications for all four images. The source's narrow emission lines at redshift <math>z = 2.225</math> and low intrinsic luminosity qualify it as a type 2 active galactic nucleus. The Magellan image shows a substantial residual that suggests a second lensing galaxy.</p>	0.9999	<div></div>	<div></div>

# FUSE + AI Interface: Purpose Model Result

## Purpose Model

Are the observations used to achieve new

### Abstract Chunks

A quadruply lensed source, J125856.3-031944, has been discovered using the DELVE survey and Wide-field Infrared colors. Follow-up direct imaging carried out with the Magellan Baade 6.5 m telescope is analyzed, as is spectroscopy with the Magellan Optical Telescope. The lensed image configuration is kite-like, with the major axis of the lensing galaxy along the line of sight with the faintest image at its tail. Redward of 6000 Å, the tail image is strongly blended with the lensing galaxy. Follow-up spectroscopy carried out with Magellan permits deblending. As the lensed image configuration is nearly circular, simple models are used to determine magnifications for all four images. The source's narrow emission lines at redshift  $z = 2.225$  and low intrinsic luminosity suggest an active galactic nucleus. The Magellan image shows a substantial residual that suggests a second lensing galaxy.

# FUSE + AI Interface: Purpose Model Result

are the observations used to achieve new scientific conclusions??

	Probability	Scale	Feed
<p>discovered using the DELVE survey and Wide-field Infrared Survey Explorer W1–W2  an Baade 6.5 m telescope is analyzed, as is spectroscopy from the 2.5 m Nordic  e, with the major axis of the lensing galaxy along the symmetry axis of the kite, and  ail image is strongly blended with the lensing galaxy. The Sloan g direct imaging  l image configuration is nearly circular, simple models give high predicted  ssion lines at redshift <math>z = 2.225</math> and low intrinsic luminosity qualify it as a type 2  ntial residual that suggests a second lensing galaxy.</p>	0.9999	<div></div>	<div></div>

# FUSE + AI Interface: Purpose Model Result

×

ed to achieve new scientific conclusions??

	Probability	Scale	Feedback
vey and Wide-field Infrared Survey Explorer W1–W2 alyzed, as is spectroscopy from the 2.5 m Nordic ensing galaxy along the symmetry axis of the kite, and ith the lensing galaxy. The Sloan g direct imaging circular, simple models give high predicted 5 and low intrinsic luminosity qualify it as a type 2 second lensing galaxy.	0.9999	<div style="width: 50px; height: 10px; background-color: #90a470;"></div>	<div style="border: 2px solid red; border-radius: 15px; padding: 10px; min-height: 100px;"> <div style="border: 1px solid #ccc; height: 25px; display: flex; align-items: center; justify-content: flex-end; padding: 2px 5px;">▼</div> </div>

# FUSE + AI Interface: Purpose Model Result

×

Are the observations used to achieve new scientific conclusions??

	Probability	Scale	Feedback
<p>31944, has been discovered using the DELVE survey and Wide-field Infrared Survey Explorer W1-W2 out with the Magellan Baade 6.5 m telescope is analyzed, as is spectroscopy from the 2.5 m Nordic figure is kite-like, with the major axis of the lensing galaxy along the symmetry axis of the kite, and rd of 6000 Å, the tail image is strongly blended with the lensing galaxy. The Sloan g direct imaging nding. As the lensed image configuration is nearly circular, simple models give high predicted ource's narrow emission lines at redshift <math>z = 2.225</math> and low intrinsic luminosity qualify it as a type 2 age shows a substantial residual that suggests a second lensing galaxy.</p>	0.9999	<div></div>	<div>▼</div> <div>not conclusive</div> <div>instrumentation</div> <div>machine learning</div> <div>catalog from lit.</div> <div>from literature/mentioning</div> <div>review article</div> <div>future obs.</div>

# FUSE + AI Interface

Sentence	Probability	Scale	Feedback
Data reduction was performed with the ESO <b>XSHOOTER</b> pipeline v.3.6.8 (A.	0.9667	<div><div></div></div>	<input type="text"/>
XSHOOTER The burst was discovered as part of observations conducted with the XSHOOTER spectrograph on ESO's <b>VLT</b> (program 115.2850).	0.9639	<div><div></div></div>	<input type="text"/>
101076489).Based on observations collected at the <b>European Southern Observatory</b> under programmes 115.2850, 115.29FC, and 115.29G3.	0.9578	<div><div></div></div>	<input type="text"/>
We use spectroscopic data from <b>VLT</b> /XSHOOTER and from instru-ments on board JWST to follow the evolution of the burst.Starting in late 2025 June, the object exhibits enhanced line emission compared to previous epochs, including a much stronger H $\alpha$ feature.	0.9575	<div><div></div></div>	<input type="text"/>
<b>XSHOOTER</b> The burst was discovered as part of observations conducted with the <b>XSHOOTER</b> spectrograph on ESO's VLT (program 115.2850).	0.9526	<div><div></div></div>	<input type="text"/>
XSHOOTER The burst was discovered as part of observations conducted with the XSHOOTER spectrograph on ESO's VLT (program <b>115.2850</b> ).	0.9481	<div><div></div></div>	<input type="text"/>
XSHOOTER The burst was discovered as part of observations conducted with the XSHOOTER spectrograph on <b>ESO's</b> VLT (program 115.2850).	0.9436	<div><div></div></div>	<input type="text"/>
101076489).Based on observations collected at the European <b>Southern Observatory</b> under programmes 115.2850, 115.29FC, and 115.29G3.	0.9276	<div><div></div></div>	<input type="text"/>
Line profile changes in H $\alpha$ from VLT/ <b>XSHOOTER</b> (left) and Paschen $\gamma$ from both <b>XSHOOTER</b> and JWST (right) seen in VLT/ <b>XSHOOTER</b> observations of Cha1107-7626.	0.9143	<div><div></div></div>	<input type="text"/>
101076489).Based on observations collected at the European Southern Observatory under programmes <b>115.2850</b> , 115.29FC, and 115.29G3.	0.9136	<div><div></div></div>	<input type="text"/>
Similarly, the observations presented here provide a glimpse into the nature of accretion in planetary-mass objects.Acknowledgments We thank John Pritchard and Paula Sanchez Saez at ESO for their support during the preparation and execution of the <b>XSHOOTER</b> observations.	0.9032	<div><div></div></div>	<input type="text"/>
Line profile changes in H $\alpha$ from <b>VLT</b> /XSHOOTER (left) and Paschen $\gamma$ from both XSHOOTER and JWST (right) seen in <b>VLT</b> /XSHOOTER observations of Cha1107-7626.	0.8629	<div><div></div></div>	<input type="text"/>
In spectra taken with XSHOOTER at ESO's <b>Very Large Telescope</b> as well as NIRSpec and MIRI on the James Webb Space Telescope, the object transitions from quiescence in 2025 April- May to a strongly enhanced accretion phase in 2025 June-August.	0.8615	<div><div></div></div>	<input type="text"/>
The specific observations analyzed can be accessed via doi:10.17909/jfng-v154.Facilities: JWST, <b>VLT</b> :Melipal.Software: EsoReflex (W.	0.8480	<div><div></div></div>	<input type="text"/>
In spectra taken with XSHOOTER at <b>ESO's</b> Very Large Telescope as well as NIRSpec and MIRI on the James Webb Space Telescope, the object transitions from quiescence in 2025 April- May to a strongly enhanced accretion phase in 2025 June-August.	0.8428	<div><div></div></div>	<input type="text"/>
We use spectroscopic data from VLT/ <b>XSHOOTER</b> and from instru-ments on board JWST to follow the evolution of the burst.Starting in late 2025 June, the object exhibits enhanced line emission compared to previous epochs, including a much stronger H $\alpha$ feature.	0.8384	<div><div></div></div>	<input type="text"/>
101076489).Based on observations collected at the European Southern Observatory under programmes 115.2850, 115.29FC, and <b>115.29G3</b> .	0.8111	<div><div></div></div>	<input type="text"/>
Seeing was $\phi$ 1.1 in all epochs except late 2025 June, when it was slightly worse. <b>XSHOOTER</b> is a medium-resolution spectrograph that offers a very broad wavelength coverage from the ultraviolet to the near-infrared (NIR).	0.7925	<div><div></div></div>	<input type="text"/>
Two further epochs were obtained in mid July and early August in Direct Discretionary (programmes 115.29FC and <b>115.29G3</b> ).	0.7813	<div><div></div></div>	<input type="text"/>

# FUSE + AI Interface

Sentence
Data reduction was performed with the ESO XSHOOTER pipeline v.3.6.8 (A.
XSHOOTER The burst was discovered as part of observations conducted with the XSHOOTER spectrograph on E
101076489).Based on observations collected at the European Southern Observatory under programmes 11
We use spectroscopic data from VLT/XSHOOTER and from instru-ments on board JWST to follow the evolution enhanced line emission compared to previous epochs, including a much stronger H $\alpha$ feature.
XSHOOTER The burst was discovered as part of observations conducted with the XSHOOTER spectrograph on
XSHOOTER The burst was discovered as part of observations conducted with the XSHOOTER spectrograph on E
XSHOOTER The burst was discovered as part of observations conducted with the XSHOOTER spectrograph on E
101076489).Based on observations collected at the European Southern Observatory under programmes 115



# FUSE + AI Interface

with the ESO **XSHOOTER** pipeline v.3.6.8 (A.

covered as part of observations conducted with the XSHOOTER spectrograph on ESO's **VLT** (program 115.2850).

tions collected at the **European Southern Observatory** under programmes 115.2850, 115.29FC, and 115.29G3.

in **VLT**/XSHOOTER and from instruments on board JWST to follow the evolution of the burst. Starting in late 2025 June, the red to previous epochs, including a much stronger H $\alpha$  feature.

covered as part of observations conducted with the **XSHOOTER** spectrograph on ESO's VLT (program 115.2850).

covered as part of observations conducted with the XSHOOTER spectrograph on ESO's VLT (program **115.2850**).

covered as part of observations conducted with the XSHOOTER spectrograph on **ESO**'s VLT (program 115.2850).

tions collected at the European **Southern Observatory** under programmes 115.2850, 115.29FC, and 115.29G3.

# FUSE + AI Interface



	Probability	Scale	Feedback
	0.9667	<div><div></div></div>	<div></div>
(program 115.2850).	0.9639	<div><div></div></div>	<div></div>
115.29FC, and 115.29G3.	0.9578	<div><div></div></div>	<div></div>
st.Starting in late 2025 June, the object exhibits	0.9575	<div><div></div></div>	<div></div>
r (program 115.2850).	0.9526	<div><div></div></div>	<div></div>
program 115.2850).	0.9481	<div><div></div></div>	<div></div>
(program 115.2850).	0.9436	<div><div></div></div>	<div></div>
115.29FC, and 115.29G3.	0.9276	<div><div></div></div>	<div></div>

# FUSE + AI Interface



	Probability	Scale	Feedback
	0.9667	<div><div></div></div>	<div></div>
gram 115.2850).	0.9639	<div><div></div></div>	<div></div>
9FC, and 115.29G3.	0.9578	<div><div></div></div>	<div></div>
tarting in late 2025 June, the object exhibits	0.9575	<div><div></div></div>	<div></div>
rogram 115.2850).	0.9526	<div><div></div></div>	<div></div>
gram 115.2850).	0.9481	<div><div></div></div>	<div></div>
gram 115.2850).	0.9436	<div><div></div></div>	<div></div>
FC, and 115.29G3.	0.9276	<div><div></div></div>	<div></div>

# FUSE + AI Interface

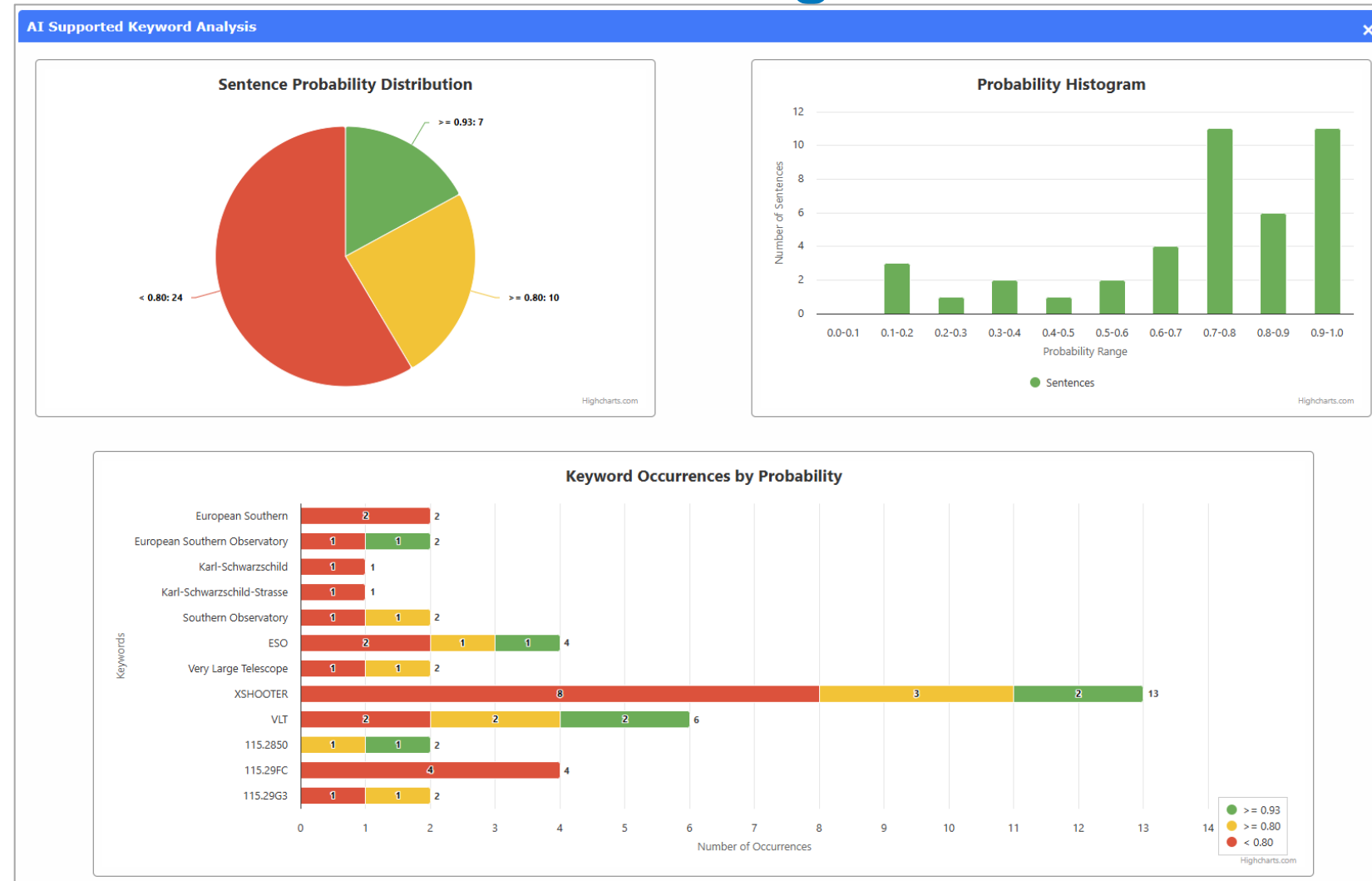


	Probability	Scale	Feedback
	0.9667	<div><div></div></div>	<div><div></div></div>
ogram 115.2850).	0.9639	<div><div></div></div>	<div><div>homonym</div></div>
9FC, and 115.29G3.	0.9578	<div><div></div></div>	<div><div>author mistake</div></div>
starting in late 2025 June, the object exhibits	0.9575	<div><div></div></div>	<div><div>typo</div></div>
rogram 115.2850).	0.9526	<div><div></div></div>	<div><div>author misunderstanding of data use</div></div>
rogram 115.2850).	0.9481	<div><div></div></div>	<div><div>Non-detection</div></div>
rogram 115.2850).	0.9436	<div><div></div></div>	<div><div></div></div>
9FC, and 115.29G3.	0.9276	<div><div></div></div>	<div><div></div></div>

# FUSE + AI Interface





Sentence	Probability	Scale	Feedback
Data reduction was performed with the ESO <b>XSHOOTER</b> pipeline v.3.6.8 (A.	0.9667	<div><div></div></div>	<input type="text"/>
XSHOOTER The burst was discovered as part of observations conducted with the XSHOOTER spectrograph on ESO's <b>VLT</b> (program 115.2850).	0.9639	<div><div></div></div>	<input type="text"/>
101076489).Based on observations collected at the <b>European Southern Observatory</b> under programmes 115.2850, 115.29FC, and 115.29G3.	0.9578	<div><div></div></div>	<input type="text"/>
We use spectroscopic data from <b>VLT</b> /XSHOOTER and from instru-ments on board JWST to follow the evolution of the burst.Starting in late 2025 June, the object exhibits enhanced line emission compared to previous epochs, including a much stronger H $\alpha$ feature.	0.9575	<div><div></div></div>	<input type="text"/>
<b>XSHOOTER</b> The burst was discovered as part of observations conducted with the <b>XSHOOTER</b> spectrograph on ESO's VLT (program 115.2850).	0.9526	<div><div></div></div>	<input type="text"/>
XSHOOTER The burst was discovered as part of observations conducted with the XSHOOTER spectrograph on ESO's VLT (program <b>115.2850</b> ).	0.9481	<div><div></div></div>	<input type="text"/>
XSHOOTER The burst was discovered as part of observations conducted with the XSHOOTER spectrograph on <b>ESO's</b> VLT (program 115.2850).	0.9436	<div><div></div></div>	<input type="text"/>
101076489).Based on observations collected at the European <b>Southern Observatory</b> under programmes 115.2850, 115.29FC, and 115.29G3.	0.9276	<div><div></div></div>	<input type="text"/>
Line profile changes in H $\alpha$ from VLT/ <b>XSHOOTER</b> (left) and Paschen $\gamma$ from both <b>XSHOOTER</b> and JWST (right) seen in VLT/ <b>XSHOOTER</b> observations of Cha1107-7626.	0.9143	<div><div></div></div>	<input type="text"/>
101076489).Based on observations collected at the European Southern Observatory under programmes <b>115.2850</b> , 115.29FC, and 115.29G3.	0.9136	<div><div></div></div>	<input type="text"/>
Similarly, the observations presented here provide a glimpse into the nature of accretion in planetary-mass objects.Acknowledgments We thank John Pritchard and Paula Sanchez Saez at ESO for their support during the preparation and execution of the <b>XSHOOTER</b> observations.	0.9032	<div><div></div></div>	<input type="text"/>
Line profile changes in H $\alpha$ from <b>VLT</b> /XSHOOTER (left) and Paschen $\gamma$ from both XSHOOTER and JWST (right) seen in <b>VLT</b> /XSHOOTER observations of Cha1107-7626.	0.8629	<div><div></div></div>	<input type="text"/>
In spectra taken with XSHOOTER at ESO's <b>Very Large Telescope</b> as well as NIRSpec and MIRI on the James Webb Space Telescope, the object transitions from quiescence in 2025 April- May to a strongly enhanced accretion phase in 2025 June-August.	0.8615	<div><div></div></div>	<input type="text"/>
The specific observations analyzed can be accessed via doi:10.17909/jfng-v154.Facilities: JWST, <b>VLT</b> :Melipal.Software: EsoReflex (W.	0.8480	<div><div></div></div>	<input type="text"/>
In spectra taken with XSHOOTER at <b>ESO's</b> Very Large Telescope as well as NIRSpec and MIRI on the James Webb Space Telescope, the object transitions from quiescence in 2025 April- May to a strongly enhanced accretion phase in 2025 June-August.	0.8428	<div><div></div></div>	<input type="text"/>
We use spectroscopic data from VLT/ <b>XSHOOTER</b> and from instru-ments on board JWST to follow the evolution of the burst.Starting in late 2025 June, the object exhibits enhanced line emission compared to previous epochs, including a much stronger H $\alpha$ feature.	0.8384	<div><div></div></div>	<input type="text"/>
101076489).Based on observations collected at the European Southern Observatory under programmes 115.2850, 115.29FC, and <b>115.29G3</b> .	0.8111	<div><div></div></div>	<input type="text"/>
Seeing was $\phi$ 1.1 in all epochs except late 2025 June, when it was slightly worse. <b>XSHOOTER</b> is a medium-resolution spectrograph that offers a very broad wavelength coverage from the ultraviolet to the near-infrared (NIR).	0.7925	<div><div></div></div>	<input type="text"/>
Two further epochs were obtained in mid July and early August in Direct Discretionary (programmes 115.29FC and <b>115.29G3</b> ).	0.7813	<div><div></div></div>	<input type="text"/>

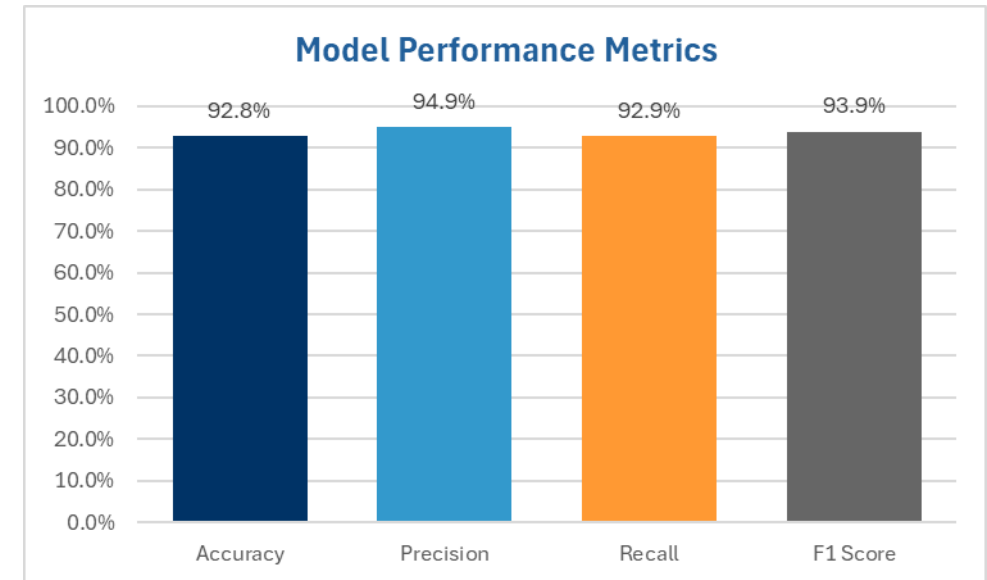
# FUSE + AI Interface: Usage Model Result



# How Well Does the AI Work?

So far, we assessed **469** papers using AI.

	Curator Decided Positive	Curator Decided Negative
AI Predicted Positive	 261 <i>(correct)</i>	 14 <i>(false alarms)</i>
AI Predicted Negative	 20 <i>(missed)</i>	 174 <i>(correct)</i>

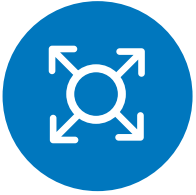


*“High and consistent performance across all key indicators..”*

# Future Work



Optimize model parameters for accuracy



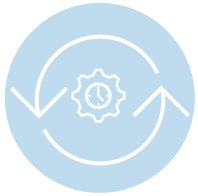
Expand training data to include more recent publications



Integrate user feedback to refine classification over time



# Summary



The models enable more consistent classification of ESO-related publications



Curators appreciate the additional tool



Early results promising, continuous improvements ongoing

**Thank You**



*library@eso.org*