ESO telbib: an interconnected database

Uta Grothkopf & Silvia Meakins
ESO Library
library@eso.org
ESO Telescope Bibliography (telbib)

- **What?**
  - Database of *refereed papers* that *use ESO data*
  - Developed and curated by the *ESO Library*

- **Why?**
  - **link** resources (papers -> data / proposals -> papers)
  - measure ESO’s *scientific output* (productivity + impact)
  - evaluate performance of telescopes + instruments
  - put ESO in context w/ other observatories
  - define guidelines for *future facilities*

- **Who is interested?**
  - Project scientists, ESO management & Council, Astronomy community

- **“Interconnected”?**
  - *multi-faceted, interlinked resource* with diverse content
  - enhanced user experience and *ease of access* to further resources
The telbib network - Overview
The telbib network - Overview

What's next?
The telbib network - Overview
The telbib network - Overview
The telbib network - Overview

What's next?
Linking in

Populating the telbib database
### Edit Paper

**PaperID:** 48422 **BibCode:**

**Bibliographic info:**

- **Title:**

**CitationCount:**

**Author(s):** (Add/Edit/List/Delete)

- **First Author:**
- **ESO Key:**

**Private Comment:**

*Example: Affiliates corrected manually: HARPS ADP/ESO as disc. w/ Jeremy Walsh 31/3/11 | N. Delmotte: UVES PDP (26D.D-5655) not ADP nor Archive [unless retrieved from Arc] 24/8/07*

**Abstract, Keywords, Public Comment, URL**

**List of Programs**

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<th>Instrument</th>
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**Additional tags:** Add/Edit

[Edit TelBib Paper] OR Close Window

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** cụm**

**telescopes, instruments, program info**
Bib info + metadata via XML interface:

- bibcode
- authors, affiliations, country (ESO site)
- title
- journal, vol., pages
- abstract, keywords
- citations, ‘reads’
ESO Archive / Obs Schedule ➔ telbib

Populating telbib with program and instrument info

1. Observing schedule
   ‣ direct access to program db via AJAX request
   ‣ for La Silla/Paranal observations
   ‣ ALMA to follow asap

2. Archive search
   PI/Cols, instruments, obs dates, objects, etc.

3. Contact ESO instrument scientists
   Communication with authors
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**proID**

**obs mode**

**ALMA/APEX partner**

**obs type**

**instruments**

**arc**
**telbib backend**

URL Press Release

```
```

URL:

```
http://adsabs.harvard.edu/cgi-bin/nph-data_query?bibcode=2013A
```

### [-] Less Information

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**Additional tags:**  Add/Edit

- Staff+Instr
- PressRelease

Data Management:

- ADSQueryOK: No
- EntryDate: Jul 22 2013 3:30PM
- ModifiedDate: Jul 26 2013 7:46PM
- ADSQueryDate: Jan 1 1900 12:00AM
- MadePublicDate: Not Made Public

**other tags**

e.g., archive tags, Press Release, surveys, ESO visitor/national telescopes, ESO staff authors,
telbib frontend: http://telbib.eso.org
The telbib network - Linking in

-- summary --
Linking out

Providing information to other resources
telbib ➔ ESO archive

- **bibliographic info**: Title, Keywords, Abstract, Publication details, BibCode, Fulltext via ADS, Citations (from ADS), Further information.
- **URL Press Rel.**: Persistent URL.
- **instruments proIDs**: Instrument(s), Telescope(s), Site(s).
- **access to data**: ESO Archive / Observation Schedule.
telbib → ESO archive

- from telbib to data files
- from observations to published papers

**proID**

088.A-0902(D), Service

**Period**
88

**Mode**
Service

**Telescope**
UT1-Antu

**Allocated time**
24 h

**Programme**
Normal

**Instrument**
FORS2

**PI/CoI**
CHAPMAN/
STROM/ GRI

**Observer**

**Remarks**

**Title**
Revealing the

**Abstract**

**Raw Products**
FileList

**Publications**
PublicationList [3]
telbib ➔ ADS

**NASA ADS Abstract Service**

- **bibliographic info**
  - Title: ALMA Redshifts of Millimeter-selected Galaxies
  - Keywords: cosmology; observations; early universe; galaxies
  - Abstract:
    
  - BibCode: 2013ApJ...767...88W
  - Fulltext (via ADS): ADS
  - Citations (from ADS): 9

- **instruments**
  - ALMA Bands, FORS2, LABOCA, SABOCA, Z-Spec

- **telescope(s)**
  - ALMA, APEX, PressRelease, VLT

- **site(s)**
  - Chajnantor, Paranal, Staff+Instr, Surveys+PRs

- **proIDs**
  - Program ID(s): 2011.0.00957.S (access to data), ALMA-Partner: Europe
    - 088.A-0733 (access to data), APEX-Partner: ESO
    - 088.A-1002 (access to data), APEX-Partner: ESO
    - 087.A-0815 (access to data), APEX-Partner: ESO
    - 087.A-0868 (access to data), APEX-Partner: ESO
    - Max-Planck data, APEX-Partner: Max-Planck

- **URL Press Rel.**

**access to fulltext**

**access to data**
SAO/NASA ADS Astronomy Abstract Service

- Find Similar Abstracts (with default settings below)
- Electronic Refereed Journal Article (HTML)
- Full Refereed Journal Article (PDF/Postscript)
- On-line Data
- References in the article
- Citations to the Article (9) (Citation History)
- Refereed Citations to the Article
- SIMBAD Objects (37)
- Also-Read Articles (Reads History)

Translate This Page

Title: ALMA Redshifts of Millimeter-selected Galaxies from the SPT Survey: The Redshift Distribution of Dusty Star-forming Galaxies

Affiliation: AA(Max-Planck-Institut für Radioastronomie, Auf dem Hügel 69, D-53121 Bonn, Germany); AB(European Southern Observatory, Karl-Schwarzschild Straße, D-85748 Garching bei München, Germany); AC(Steward Observatory, University of Arizona, 933 North Cherry
**telbib ➔ ADS ➔ telbib**

telbib provides bibcodes of papers with data links

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**Send Query**  **Return Query Form**  **Store Default Form**  **Clear**
telbib → ADS → telbib

telbib provides bibcodes of papers with data links

+ search criterion, e.g., pub year

ADO 'D-links'

ESO Archive / Observation Schedule

access to data
telbib ➔ ESO Press Release

ESO Telescope Bibliography

bibliographic info

ESO Press Release

URL Press Rel.

fulltext

access to ESO Press Release

instruments

proIDs

access to data

ALMA Rewrites History of Universe’s Stellar Baby Boom

Record-breaking haul of distant galaxies includes most distant detection of water published to date

13 March 2013

Science: 2013Natur.495...344V
data: 2013ApJ...767..132H
2013ApJ...767...88W

→ access to telbib papers featured in Press Release (and from there to data)
Selected astronomical object brings up ‘tooltip’ with links to CDS databases

- **bibliographic info**
- **URL Press Rel.**
- **instruments proIDs**
- **fulltext**
- **ESO Press Release**
- **access to data**

**NGC 6752**

ESO Press Release

Sodium content as a predictor of the advanced evolution of globular cluster stars.

- **Author(s)**: Campbell, Simon W.; D'Orazi, Valentina; Yong, David; Constantino, Thais; Wylie-de Boer, Elizabeth C.; Grundahl, Frank
- **Title**: Sodium content as a predictor of the advanced evolution of globular cluster stars.
- **BibCode**: 2013Natur.498..198C
- **Fulltext (via ADS)**: ADS

**Instruments**
- FLAMES-GIRAFFE
- Telescope(s): PressRelease, VLT

**ProgramID(s)**: 089.D-0038 (access to data)
Stabilobj courtesy of Sébastien Derriere, CDS
http://astro.u-strasbg.fr/~derriere/
Altmetric pulls together online activity. Score: weighted value (quality and quantity)

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<th>Campbell, Simon W; D’Orazi, Valentina; Yong, David; Constantino, Thomas N; Lattanzio, John C; Standiffe, Richard J; Angelou, George C; Wynne-de Boer, Elizabeth C; Grundahl, Frank</th>
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<td>The asymptotic giant branch (AGB) phase is the final stage of nuclear burning for low-mass stars. Although Milky Way globular clusters are now known to harbour (at least two) AGB stars, they still provide relatively homogeneous samples of stars that are used to constrain stellar evolution theory. It is possible that a fraction of cluster stars with masses around the current turn-off mass (that is, the mass of the stars that are currently dominant in the cluster) will evolve through the AGB phase. Here we report that all of the second-generation stars in the globular clusters M13 and NGC 188 fail to reach the AGB phase. Through spectroscopic abundance measurements, we find that our sample has a low sodium abundance, indicating that they are exclusively first-generation stars. This implies that N208 cannot be reliably used for star counts to test stellar evolution timescales if the AGB population is included. We have no clear explanation for this observation.</td>
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**URL Press Rel.**


**Instruments**

- FLAMES-GIRAFFE

**Telescope(s)**

- PressRelease, VLT

**Site(s)**

- Paranal, Surveys+PRs

**ProgramID(s)**

- 089.D-0038 (access to data)
Altmetric pulls together online activity. Score: weighted value (quality and quantity).
### Detailed Information

**Author(s)**
Campbell, Simon W.; D’Orazio, Valentina; Yong, David; Constantin, Thomas N.; Lattanzio, John C.; Standifire, Richard J.; Angelou, George C.; Wyle-de Boer, Elizabeth C.; Grundahl, Frank

**Title**
Sodium content as a predictor of the advanced evolution of globular cluster stars

**Abstract**
The asymptotic giant branch (AGB) phase is the final stage of nuclear burning for low-mass stars, and the Milky Way known to harbour (at least) two generations of stars, they still provide relatively few examples of stars that are currently undergoing this AGB phase. Here we report the first generation stars in the globular cluster M92 with low sodium abundance, indicating that generation stars. This investigation is part of a larger effort to understand the evolution of star clusters. We used for star counts to test stellar evolution timescales.

**Publication details**

**BibCode**
2013Natur.498..196C

**Fulltext (via ADS)**
ADS

**Citations (from ADS)**
1

**Further information**

**Instrument(s)**
FLAMES-GIRAFFE

**Telescope(s)**
PressRelease, VLT

**Site(s)**
Paranal, Surveys PRAs

**ProgramID(s)**
089.D-0038 (access to data)

**Persistent URL**
The telbib network - Linking out

-- summary --
Anywhere ➞ telbib (via API)

- API = Application Programming Interface
- routine to automatically query telbib and retrieve structured content
- various parameters (author, year from/to, proID, instrument, etc.)
- Result: XML output
- Feel free to use it! (reference to source appreciated)
## The telbib network - identifiers

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What’s next?

- **ALMA:**
  - automated links to ALMA archive (when available)

- **ESO Observing Proposals Office:**
  - revised system under development; integrate telbib w/ new system

- **ESO archive data products:**
  - data products mostly from survey telescopes
  - proper linking between telbib and archive (proID? requestID?)

- **Challenges:**
  - growing number of publications and facilities that are tracked
  - increasing complexity of telbib system
The telbib network

Questions & suggestions:
Uta Grothkopf / Silvia Meakins
library@eso.org

What's next?