



DJIN Presentation



What is DJIN ?



A tool developed here at **CDS**

- Software designed in 2008 and updated in 2019
- Automatic **recognition of object names** in literature
- Helps the documentalists in the analysis of articles



How does it work ?

- DJIN reads **XCDS** files* directly from the **Bibliography Center Supervisor (BCS)**
- With the use of the **Dictionary of Nomenclature** it detects object names



* XCDS is a format created specially for DJIN and our use

The background of the image is a deep space photograph of the Milky Way galaxy, showing a dense field of stars and a prominent band of light stretching across the frame.

A | A | IOP
— | —
S



We get xml files from **IOP** and transform them into XCDS with the **BCS**

A A | IOP
S

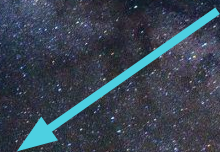
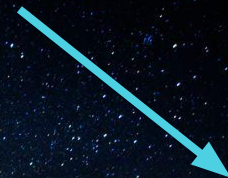


A | A | IOP
S



DJIN can now access the **XCDS** files directly from the **BCS**

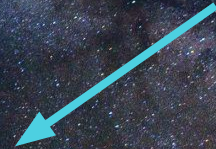
A A | IOP
S



A A | IOP
S



The analysis is made and **SIMBAD** is updated

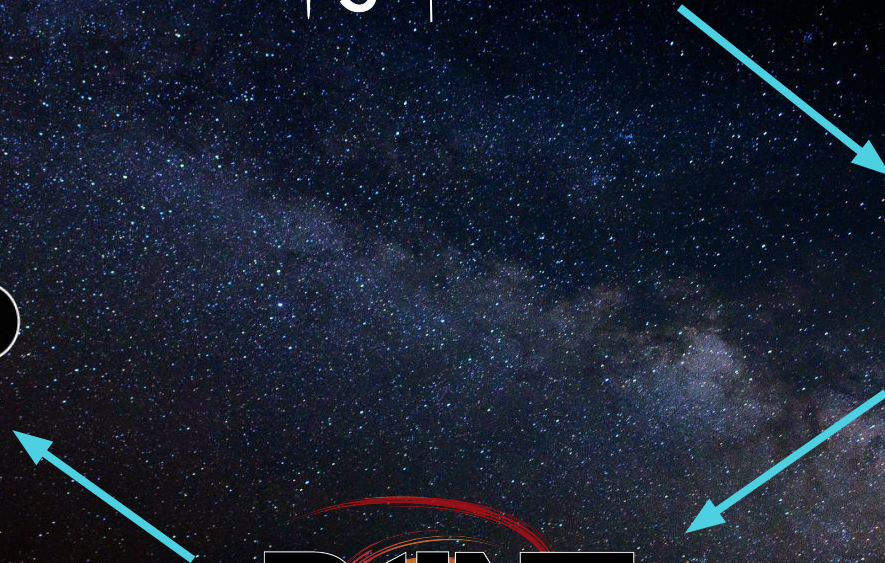


A A | IOP
S

SINBAD



DJIN



Journal: ApJ Volume: 954 Bibcode: 2023ApJ...954...55R

source=XCDS

Abundance Analysis of Stars at Large Radius in the Sextans Dwarf Spheroidal Galaxy *

Ian U. Roediger, Andrew B. Pace, Vincinius M. Placco, Nelson Caldwell, Sergey E. Koposov, Mario Mateo, Edward W. Olszewski, Matthew G. Walker,

Abstract

We present the stellar parameters and chemical abundances of 30 elements for five stars located at large radii (3.5–10.7 times the half-light radius) in the Sextans galaxy. We selected these stars using proper motions, radial velocities, and metallicities, and we confirm them as metal-poor members of Sextans with $-3.34 \leq [\text{Fe}/\text{H}] \leq -2.64$ using high-resolution optical spectra collected with the Magellan Inamori Kyocera Echelle spectrograph. Four of the five stars exhibit normal abundances of C ($-0.34 \leq [\text{C}/\text{Fe}] \leq +0.36$), mild enhancement of the α elements Mg, Si, Ca, and Ti ($(\alpha/\text{Fe}) = +0.12 \pm 0.03$), and unremarkable abundances of Na, Al, K, Sc, V, Cr, Mn, Co, Ni, and Zn. We identify three chemical signatures previously unknown among stars in Sextans. One star exhibits large overabundances ($(\text{X}/\text{Fe}) > +1.2$) of C, N, O, Na, Mg, Si, and K, and large deficiencies of heavy elements ($(\text{Sr}/\text{Fe}) = -2.37 \pm 0.25$, $(\text{Ba}/\text{Fe}) = -1.45 \pm 0.20$, $(\text{Eu}/\text{Fe}) < +0.05$), establishing it as a member of the class of carbon-enhanced metal-poor stars with no enhancement of neutron-capture elements. Three stars exhibit moderate enhancements of Eu ($+0.17 \leq [\text{Eu}/\text{Fe}] \leq +0.70$), and the abundance ratios among 12 neutron-capture elements are indicative of r-process nucleosynthesis. Another star is highly enhanced in Sr relative to heavier elements ($(\text{Sr}/\text{Ba}) = +1.21 \pm 0.25$). These chemical signatures can all be attributed to massive, low-metallicity stars or their descendants. Our results, the first for stars at large radius in Sextans, demonstrate that these stars were formed in chemically inhomogeneous regions, such as those found in ultra-faint dwarf galaxies.

Keywords

Dwarf spheroidal galaxies
Nucleosynthesis
Stellar abundances

Supporting material : machine-readable table (see Table 4)

1. Introduction

The chemical compositions of old stars reflect which elements were produced, and in what amounts, by the earliest generations of stars and supernovae. Old stars are found in many Galactic environments, including the surviving populations of dwarf galaxies surrounding the Milky Way. The star formation histories of the lowest mass dwarf galaxies, often referred to as ultra-faint dwarf (UFD) galaxies indicate that these systems formed large fractions-up to $\approx 80\%$ of their stars before the end of reionization (Brown et al. 2014). Stellar chemistry supports this conclusion. Detailed chemical analysis of individual stars in UFD galaxies reveals that they host relatively high fractions of stars that may have formed from the remnants of zero-metallicity Population III stars (Frebel & Norris 2018, and references therein).

More massive dwarf galaxies, often referred to as classical dwarf spheroidal (dSph) galaxies, also formed relatively high fractions of their stars at early times (e.g., Revaz et al. 2008; Weisz et al. 2014). The dSph galaxies are massive enough to have sustained internal chemical evolution, so chemical signatures associated with the earliest stars and supernovae are rare (e.g., Starkenburg et al. 2010; Kirby et al. 2011b), but present (e.g., Fuhrig et al. 2004; Frebel et al. 2010; Skúladóttir et al. 2023).

Most previous studies have focused on stars in the central regions of dSph galaxies, but recent efforts have confirmed members at large separations from their centers. These efforts have been based on spectroscopic follow-up of wide-field photometric searches (e.g., Muñoz et al. 2005, 2008; Westfall et al. 2008; Hendricks et al. 2014) or wide-field broadband photometry combined with proper-motion measurements from the Gaia mission (Prusti et al. 2018). Studies by Chiti et al. (2021, 2023), Filon & Wyse (2021), Longeard et al. (2022, 2023), Qi et al. (2022), Yang et al. (2022), and Sestito et al. (2023a, 2023b) have shown that several dSph and UFD galaxies contain stars near their tidal radii. These extended stellar halos may have formed through dwarf galaxy mergers (Rey et al. 2019; Tarumi et al. 2021), and multiple mergers may have occurred within individual dSph galaxies around the Milky Way (Griffen et al. 2018; Deason et al. 2023). These stars frequently exhibit low metallicities, $[\text{Fe}/\text{H}] < -2$. The outer regions of UFD and dSph galaxies may host previously unrecognized reservoirs of stars whose chemical enrichment was potentially dominated by the earliest generations of stars and supernovae.

Our study builds on previous work by examining the chemistry of stars in the outer regions of the Sextans galaxy for the first time. Sextans is 89 kpc from the center of the Milky Way (Fritz et al. 2018). Battaglia et al. (2007) computed orbit integrations for Sextans that account for the reflex motion of the Milky Way on the Milky Way. These calculations indicate that Sextans is on a moderately eccentric orbit ($e \approx 0.08$) with an apical pericenter around 70 kpc and an apical apocenter around 120 kpc. The

Bibcode : 2023ApJ...954...55R

- We start by entering the code of the article (bibcode)
- DJIN will then fetch the article from the BCS

DJIN finds a list of **potential names** from:

Formats of the Dictionary of Nomenclature

Formats added manually

Regular expressions added manually

49 object names (129)

- 1500-2300 (1)
- 3828784987277714560 (1)
- 3828963348679468032 (1)
- 3829054779943345536 (1)
- 3830319390113933952 (1)
- 3830390720930784640 (1)
- 3830721875794075904 (1)
- 3831812247731524608 (1)
- A-X (1)
- A09 (1)
- CN A (1)
- DR13 (1)
- DR9 (1)
- H I (1)
- H2 (1)
- J 175 (1)
- J 220 (1)
- J 345 (1)
- J1008+0001 (25)
- J1008+001 (1)
- J100801.54+000108.1 (1)
- J1010-0220 (12)
- J101039.85-022007.8 (1)
- J1013-0211 (2)
- J101341.76-021124.4 (1)
- J101435.84-005401.4 (1)
- J1015-0238 (10)
- J101542.20-023838.6 (1)
- J1018-0155 (11)
- J1018-0209 (12)
- J101800.19-015521.4 (1)
- J101837.07-020936.2 (1)
- J2000 (2)
- L20 (1)
- La II (3)
- Large Magellanic Cloud (1)
- machine-readable (4)
- O2 (1)
- Reticulum II (1)
- S01 (1)
- Sculptor dSph (2)
- Sextans dSph (5)
- Sextans dwarf galaxy (1)
- Sextans Dwarf Spheroidal (2)
- T10 (1)
- T20 (1)
- Tucana III (1)
- Ursa Minor (2)

49 object names (129)

- 1500-2300 (1)
- 3828784987277714560 (1)
- 3828963348679468032 (1)
- 3829054779943345536 (1)
- 3830319390113933952 (1)
- 3830390720930784640 (1)
- 3830721875794075904 (1)
- 3831812247731524608 (1)
- A-X (1)
- A09 (1)
- CN A (1)
- DR13 (1)
- DR9 (1)
- H I (1)
- H2 (1)
- J 175 (1)
- J 220 (1)
- J 345 (1)
- J1008+0001 (25)
- J1008+001 (1)
- J100801.54+000108.1 (1)
- J1010-0220 (12)
- J101039.85-022007.8 (1)
- J1013-0211 (2)
- J101341.76-021124.4 (1)
- J101435.84-005401.4 (1)
- J1015-0238 (10)
- J101542.20-023838.6 (1)
- J1018-0155 (11)
- J1018-0209 (12)
- J101800.19-015521.4 (1)
- J101837.07-020936.2 (1)
- J2000 (2)
- L20 (1)
- La II (3)
- Large Magellanic Cloud (1)
- machine-readable (4)
- O2 (1)
- Reticulum II (1)
- S01 (1)
- Sculptor dSph (2)
- Sextans dSph (5)
- Sextans dwarf galaxy (1)
- Sextans Dwarf Spheroidal (2)
- T10 (1)
- T20 (1)
- Tucana III (1)
- Ursa Minor (2)

source=XCDs

Abundance Analysis of Stars at Large Radius in the Sextans Dwarf Spheroidal Galaxy *

Ian U. Roediger, Andrew B. Pace, Viniccius M. Placco, Nelson Caldwell, Sergey E. Kopysov, Mario Mateo, Edward W. Olszewski, Matthew G. Walker.

Abstract

We present the stellar parameters and chemical abundances of 30 elements for five stars located at large radii (3.5–10.7 times the half-light radius) in the Sextans dwarf galaxy. We selected these stars using proper motions, radial velocities, and metallicities, and we confirm them as metal-poor members of Sextans with $-3.34 \leq [\text{Fe}/\text{H}] \leq -2.84$ using high-resolution optical spectra collected with the Magellan Inamori Kyocera Echelle spectrograph. Four of the five stars exhibit normal abundances of C ($+0.34 \leq [\text{C}/\text{Fe}] \leq +0.36$), mild enhancement of the α elements Mg, Si, Ca, and Ti ($[\alpha/\text{Fe}] = +0.12 \pm 0.03$), and unremarkable abundances of Na, Al, K, Sc, V, Cr, Mn, Co, Ni, and Zn. We identify three chemical signatures previously unknown among stars in Sextans. One star exhibits large overabundances ($[\text{X}/\text{Fe}] = +1.2$) of C, N, O, Na, Mg, Si, and K, and large deficiencies of heavy elements ($[\text{Sr}/\text{Fe}] = -2.37 \pm 0.25$, $[\text{Ba}/\text{Fe}] = -1.45 \pm 0.20$, $[\text{Eu}/\text{Fe}] \leq +0.05$), establishing it as a member of the class of carbon-enhanced metal-poor stars with no enhancement of neutron-capture elements. Three stars exhibit moderate enhancements of Eu ($+0.17 \leq [\text{Eu}/\text{Fe}] \leq +0.70$), and the abundance ratios among 12 neutron-capture elements are indicative of r-process nucleosynthesis. Another star is highly enhanced in Sr relative to heavier elements ($[\text{Sr}/\text{Ba}] = +1.21 \pm 0.25$). These chemical signatures can all be attributed to massive, low-metallicity stars or their end states. Our results, the first for stars at large radius in Sextans, demonstrate that these stars were formed in chemically inhomogeneous regions, such as those found in ultra-faint dwarf galaxies.

Keywords

Dwarf spheroidal galaxies
Nucleosynthesis
Stellar abundances

Supporting material : machine-readable table (see Table 4)

1. Introduction

The chemical compositions of old stars reflect which elements were produced, and in what amounts, by the earliest generations of stars and supernovae. Old stars are found in many Galactic environments, including the surviving populations of dwarf galaxies surrounding the Milky Way. The star formation histories of the lowest mass dwarf galaxies, often referred to as ultra-faint dwarf (UFD) galaxies indicate that these systems formed large fractions-up to $\approx 80\%$ of their stars before the end of reionization (Brown et al. 2014). Stellar chemistry supports this conclusion. Detailed chemical analysis of individual stars in UFD galaxies reveals that they host relatively high fractions of stars that may have formed from the remnants of zero-metallicity Population III stars (Frebel & Norris 2015, and references therein).

More massive dwarf galaxies, often referred to as classical dwarf spheroidal (dSph) galaxies, also formed relatively high fractions of their stars at early times (e.g. Revaz et al. 2009; Weisz et al. 2014). The dSph galaxies are massive enough to have sustained internal chemical evolution, so chemical signatures associated with the earliest stars and supernovae are rare (e.g. Starkenburg et al. 2010; Kirby et al. 2011b), but present (e.g. Fulbright et al. 2004; Frebel et al. 2010; Skúladóttir et al. 2023).

Most previous studies have focused on stars in the central regions of dSph galaxies, but recent efforts have confirmed members at large separations from their centers. These efforts have been based on spectroscopic follow-up of wide-field photometric searches (e.g., Muñoz et al. 2005, 2008; Westfall et al. 2008; Hendricks et al. 2014) or wide-field broadband photometry combined with proper-motion measurements from the Gaia mission (Prust et al. 2016). Studies by Chiti et al. (2021, 2023), Filion & Wyse (2021), Longead et al. (2022, 2023), Qi et al. (2022), Yang et al. (2022), and Settito et al. (2023a, 2023b) have shown that several dSph and UFD galaxies contain stars near their tidal radii. These extended stellar halos may have formed through dwarf galaxy mergers (Rey et al. 2019; Tarumi et al. 2021), and multiple mergers may have occurred within individual dSph galaxies around the Milky Way (Griffen et al. 2018; Deason et al. 2023). These stars frequently exhibit low metallicities, $[\text{Fe}/\text{H}] < -2$. The outer regions of UFD and dSph galaxies may host previously unrecognized reservoirs of stars whose chemical enrichment was potentially dominated by the earliest generations of stars and supernovae.

Our study builds on previous work by examining the chemistry of stars in the outer regions of the Sextans dwarf galaxy for the first time. Sextans is 89 kpc from the center of the Milky Way (Fritz et al. 2016). Battaglia et al. (2022) computed orbit integrations for Sextans that account for the reflex motion of the Milky Way (MW) on the Milky Way. These calculations indicate that Sextans is on a moderately eccentric orbit ($e = 0.58$), with an orbital pericenter around 70 kpc and an orbital apocenter around 120 kpc. The

The list is cleaned up by the documentalist

We added the regular expressions: **'machine-readable'** and **'data behind figures'** specifically for the AAS journals

- 32 object names (109)
- 1500-2300 (1)
- 382878498727714560 (1)
- 3828963348679468032 (1)
- 3829054779943345536 (1)
- 383031939011393952 (1)
- 3830390720930784640 (1)
- 3831812247731524608 (1)
- 1008+0001 (25)
- 1008+001 (1)
- 1008+001 (1)
- 100801.54+000108.1 (1)
- 1010-0220 (12)
- 101039.85-022007.8 (1)
- 1013-0211 (2)
- 101341.76-021124.4 (1)
- 1014-0054 (2)
- 101435.84-005401.4 (1)
- 1015-0238 (10)
- 101542.20-023838.6 (1)
- 1018-0155 (11)
- 1018-0209 (12)
- 101800.19-015521.4 (1)
- 101837.07-020936.2 (1)
- Large Magellanic Cloud (1)
- machine-readable (4)
- Reticulum II (1)
- Sculptor dSph (2)
- Sextans dSph (5)
- Sextans dwarf galaxy (1)
- Sextans Dwarf Spheroidal (2)
- Tucana III (1)
- Ursa Minor (2)

The screenshot shows a research paper in a web browser. The title is "Abundance Analysis of Stars at Large Radius in the Sextans Dwarf Spheroidal Galaxy". The authors are Ian U. Roederer, Andrew B. Pace, Vinciguerra M. Placco, Nelson Caldwell, Sergey E. Koposov, Mario Mateo, Edward W. Olszewski, and Matthew G. Walker. The paper is published in the *Journal of Astrophysics and Astronomical Spectroscopy*, Volume 954, Bibcode: 2023ApJ...954...958R. The abstract discusses the chemical abundances of 30 elements for five stars in the Sextans dwarf galaxy, highlighting their metal-poor nature and the presence of heavy elements. The paper includes an abstract, keywords, supporting material (a machine-readable table), and an introduction. The introduction discusses the chemical compositions of old stars and the formation of dwarf galaxies. The paper is available on the AAS website.

We inform the **VizieR**
team that they have work
to do for that article



```
Console simbadMAJ
Fichier Edition Graphic
O[BJ] | B[IB] | h[elp] : update > b 2023ApJ...954...55R

2023ApJ...954...55R: ROEDERER I.U., PACE A.B., PLACCO V.M., CALDWELL N., KOPOSOV S.E.,
MATEO M., OLSZEWSKI E.W. and WALKER M.G.
<Astrophys. J., 954, 55 (2023/September-1)>
Abundance Analysis of Stars at Large Radius in the Sextans Dwarf Spheroidal Galaxy.
--Status:~
--Errata:~
----Dic:~
-(Flags):(abstract)
---Files:~
---Notes:~
CDS-work:=0=
---Dates:11-Sep-2023 / 11-Sep-2023

2023ApJ...954...55R : update > c ct =E= table 4 -MN-15.09.23
Commentaire privé modifié en :
=E= table 4 -MN-15.09.23
2023ApJ...954...55R : update > v
```


Commands for Gaia DR3 3828784987277714560

[1] Identifier not found in the database : Gaia DR3 3828784987277714560

```

c c 10 15 42.2053663577 -02 38 38.656798540 (0) [0.0749 0
.0776 90] A 2020Cat.1350....0G
c p -0.544 0.154 [0.090 0.095 90] A 2020Cat.1350....0G
a dat pm |-0.544 [ 0.090 ]| 0.154 [ 0.095 ]|ICRS|2020Cat.135
0....0G|
c m G 17.082796 [0.002929] C 2022Cat.1355....0G
a i SDSS J101542.20-023838.6
c mAB u 20.203 [0.054] C 2020ApJ...249....3A
c mAB g 18.014 [0.006] B 2020ApJ...249....3A
c mAB r 17.078 [0.005] B 2020ApJ...249....3A
c mAB i 16.666 [0.004] B 2020ApJ...249....3A
c mAB z 16.422 [0.008] B 2020ApJ...249....3A

```

OK from Vizier Position Cancel

File Name Identifier Search Configuration Help

Journal: ApJ Volume: 954 Bibcode: 2023ApJ...954...508

33 object names (180)

- Carina (2)
- Draco (2)
- Gaia DR3 3828784987277714560
- Gaia DR3 382896334867946803
- Gaia DR3 382905477994334553
- Gaia DR3 383031939011393395
- Gaia DR3 383039072093078464
- Gaia DR3 3830721875794075904
- Gaia DR3 383181224773152460
- J1008+0001 (25)
- J1008+001 (1)
- J1010-0220 (12)
- J1013-0211 (2)
- J1014-0054 (2)
- J1015-0238 (10)
- J1018-0155 (11)
- J1018-0209 (12)
- Large Magellanic Cloud (1)
- Reticulum II (1)
- Sculptor dSph (2)
- SDSS J100801.54+000108.1 (1)
- SDSS J10139.95-022007.8 (1)
- SDSS J101341.76-021124.4 (1)
- SDSS J101435.84-005401.4 (1)
- SDSS J101542.20-023838.6 (1)
- SDSS J101800.19-015521.4 (1)
- SDSS J101837.07-020936.2 (1)
- Sextans (72)
- Sextans dSph (5)
- Sextans dwarf galaxy (1)
- Sextans Dwarf Spheroidal (2)
- Tucana III (1)
- Ursa Minor (2)

Source_ID	Star Name	Star Name	R.A.	Decl.	Re/Rh	G	g	B	V	E(B-V)
(Gaia_)	(SDSS_)	(Adopted)	(J2000)	(J2000)		(Gaia)	(SDSS)	(G)	(G)	(G)

Stars with high-S/N observations

15 Identifiers (0 already entered)

- 2MASS J10103984-0220079
- Gaia DR3 3828784987277714560
- Gaia DR3 3829054779943345536
- Gaia DR3 3830319390113933952
- Gaia DR3 3830390720930784640
- Gaia DR3 3830721875794075904
- Gaia DR3 3831812247731524608
- NAME Carina dSph
- NAME Draco dSph
- NAME Large Magellanic Cloud
- NAME Reticulum II
- NAME Sculptor dSph
- NAME Sextans dSph
- NAME Tucana III
- NAME Ursa Minor

Stars observed

Notes:

- a Gaia EDR3
- b Sloan Digital Sky Survey
- c The B and V colors transformed to the Schlegel & Finkbeiner (2017) system using the Population II star

Figure 1 illustrates the medium-resolution orange star population in the dwarf galaxy. The plot shows the radius $R_c/R_h = 11$ and the number of stars N within a given radius. The data points are shown for the dwarf galaxy, and the error bars represent the uncertainty in the number of stars. The plot shows that the dwarf galaxy has a larger radius than the previous high-resolution sample (Section 2.2), and the majority of stars are within 2 arcseconds of the center. At least two, and possibly four, of the stars are within the radius at which the stellar overdensity of the dwarf galaxy is high.

OK from Vizier Position Cancel

We can create objects and/or add data in SIMBAD directly from DJIN

Once everything is ready DJIN will run a script to **update SIMBAD** with all the objects we selected

Simulation

Proper motions: 0.056 0.074 [0.078 0.099] C 1995AJ...110.27475

Identifiers (18):

NAME UMi	Anon 1508+67	DDO 199
K73 663	LEDA 54074	MCG+11-18-030
NAME UMi dSph	NAME Ursa Minor	NAME UMi Galaxy
NAME UMi Dwarf Galaxy	NAME Ursa Minor Dwarf Galaxy UGC 9749	
UZC J150910.2+671252	Z 318-18	Z 319-1
Z 1508.2+6723	[VDD93] 204	EQ 1508+674

Flux:

B : 13.60 [-] D 2005A&A...436..443V
V : 10.6 [0.5] D 2012AJ...144...4M
K : 8.17 [-] D 2008MNRAS.389.1924F

Mesurements:

Number of References (1326):

Notes:

NAME Ursa Minor : update > q!

2023Apr...954...55R : update OBJ > .
2023Apr...954...55R : update > q!

[OBJ] | [OBJ] | [h[elp]] : update > q

Statistiques :

{Identificateur non present dans Simbad =4, Nouvel objet cree =4}

*** BYE !! fin de Simup ***
/home/neuville/testDjin

Close

File Name Identifier Search Configuration Help

Journal: Apr Volume: 954 Bibcode: 2023Apr...954...55R

33 object names (180)

- Carina (2)
- Draco (2)
- Gaia DR3 38287849872771456
- Gaia DR3 382896334867946803
- Gaia DR3 382905477994334553
- Gaia DR3 383031939011393395
- Gaia DR3 383039072093078464
- Gaia DR3 38307218759407590
- Gaia DR3 383181224773152460
- J1008+001 (25)
- J1008+001 (1)
- J1010-0220 (12)
- J1013-0211 (2)
- J1014-0054 (2)
- J1015-0238 (10)
- J1018-0155 (11)
- J1018-0209 (12)
- Large Magellanic Cloud (1)
- Reticulum II (1)
- Sculptor dSph (2)
- SDSS J100801.54+000108.1 (1)
- SDSS J101039.85-022007.8 (1)
- SDSS J101341.76-021124.4 (1)
- SDSS J101435.84-005401.4 (1)
- SDSS J101542.20-023838.6 (1)
- SDSS J101800.19-015521.4 (1)
- SDSS J101837.07-020936.2 (1)
- Sextans (72)
- Sextans dSph (5)
- Sextans dwarf galaxy (1)
- Sextans Dwarf spheroidal (2)
- Tucana III (1)
- Ursa Minor (2)

source=XCD5

Abundance Analysis of Stars at Large Radius in the **Sextans Dwarf Spheroidal** Galaxy *

Jan U. Roederer, Andrew B. Pace, Vincius M. Placco, Nelson Caldwell, Sergey E. Koposov, Mario Mateo, Edward W. Olszewski, Matthew G. Walker.

Abstract

We present abundance measurements for stars located at large radii (3.5 kpc) in the Sextans dwarf galaxy. We selected these stars from members of the Magellanic Inamori stream (C/Fe) \leq +1.0 and unremarkable α abundances ($\alpha/\text{Fe} \leq$ +0.20). These stars show no enhancement of α/Fe ($\alpha/\text{Fe} \leq$ +0.70), consistent with previous studies. These chemical signatures are consistent with the first formation of stars in the Sextans dwarf galaxy. Our study builds on previous work by examining the chemistry of stars in the outer regions of the Sextans dwarf galaxy for the first time. Sextans is 89 kpc from the center of the Milky Way (Fritz et al. 2018). Battaglia et al. (2022) computed orbit integrations for Sextans that account for the reflex motion of the Milky Way. These calculations indicate that Sextans is on a moderately eccentric orbit (e = 0.50) with an orbital eccentricity around 70 km/s and an orbital apocenter around 1.15 kpc from the center of the Milky Way. These calculations indicate that Sextans is on a moderately eccentric orbit (e = 0.50) with an orbital eccentricity around 70 km/s and an orbital apocenter around 1.15 kpc from the center of the Milky Way.

Identifiers (18):

NAME UMi	Anon 1508+67	DDO 199
K73 663	LEDA 54074	MCG+11-18-030
NAME UMi dSph	NAME Ursa Minor	NAME UMi Galaxy
NAME UMi Dwarf Galaxy	NAME Ursa Minor Dwarf Galaxy UGC 9749	
UZC J150910.2+671252	Z 318-18	Z 319-1
Z 1508.2+6723	[VDD93] 204	EQ 1508+674

Mesurements:

Number of References (1326):

Notes:

Supp

1. In NAME Ursa Minor : update > q!

2023Apr...954...55R : update OBJ > .
2023Apr...954...55R : update > q!

[OBJ] | [OBJ] | [h[elp]] : update > q

Statistiques :

{Identificateur non present dans Simbad =4, Nouvel objet cree =4}

More messages: *** BYE !! fin de Simup ***
/home/neuville/testDjin

Close

Abundance Analysis of Stars at Large Radius in the Sextans Dwarf Spheroidal Galaxy.

ROEDERER I.U., PACE A.B., PLACCO V.M., CALDWELL N., KOPOSOV S.E., MATEO M., OLSZEWSKI E.W. and WALKER M.G.

Abstract (from CDS):

We present the stellar parameters and chemical abundances of 30 elements for five stars located at large radii (3.5-10.7 times the half-light radius) in the Sextans dwarf spheroidal galaxy. We selected these stars using proper motions, radial velocities, and metallicities, and we confirm them as metal-poor members of Sextans with $-3.34 \leq [\text{Fe}/\text{H}] \leq -2.64$ using high-resolution optical spectra collected with the Magellan Inamori Kyocera Echelle spectrograph. Four of the five stars exhibit normal abundances of C ($-0.34 \leq [\text{C}/\text{Fe}] \leq +0.36$), mild enhancement of the α elements Mg, Si, Ca, and Ti ($[\alpha/\text{Fe}] = +0.12 \pm 0.03$), and unremarkable abundances of Na, Al, K, Sc, V, Cr, Mn, Co, Ni, and Zn. We identify three chemical signatures previously unknown among stars in Sextans. One star exhibits large overabundances ($[\text{X}/\text{Fe}] > +1.2$) of C, N, O, Na, Mg, Si, and K, and large deficiencies of heavy elements ($[\text{Sr}/\text{Fe}] = -2.37 \pm 0.25$, $[\text{Ba}/\text{Fe}] = -1.45 \pm 0.20$, $[\text{Eu}/\text{Fe}] < +0.05$), establishing it as a member of the class of carbon-enhanced metal-poor stars with no enhancement of neutron-capture elements. Three stars exhibit moderate enhancements of Eu ($+0.17 \leq [\text{Eu}/\text{Fe}] \leq +0.70$), and the abundance ratios among 12 neutron-capture elements are indicative of r -process nucleosynthesis. Another star is highly enhanced in Sr relative to heavier elements ($[\text{Sr}/\text{Ba}] = +1.21 \pm 0.25$). These chemical signatures can all be attributed to massive, low-metallicity stars or their end states. Our results, the first for stars at large radius in Sextans, demonstrate that these stars were formed in chemically inhomogeneous regions, such as those found in ultra-faint dwarf galaxies.

Abstract Copyright: © 2023. The Author(s). Published by the American Astronomical Society.

Journal keyword(s): Dwarf spheroidal galaxies - Nucleosynthesis - Stellar abundances

Status at CDS: Large table(s) will be appraised for possible ingestion in VizierR.

Simbad objects: 15

Commentaire privé:

=E= table 4 -MN-15.09.23

▶ Full paper

▶ View the references in ADS

Number of rows : 15

Show Raw id

Show 100 entries

N	Identifier	Otype	ICRS (J2000) RA	ICRS (J2000) DEC	Redshift	Sp type	18
1	NAME Sculptor Dwarf Galaxy	G	01 00 09.4	-33 42 32	0.000372	~	
2	NAME Reticulum II	G	03 35 42.1	-54 02 57	0.000210	~	
3	NAME LMC	G	05 23 34.6	-69 45 22	0.000875	~	
4	NAME Carina dSph	G	06 41 36.7	-50 57 58	0.000744	~	
5	MGC 2663	*	10 08 01.5437288352	+00 01 08.082695388	~	~	
6	2MASS J10103984-0220079	*	10 10 39.8502247429	-02 20 07.766571558	-0.002698	~	
7	NAME Sextans dSph	G	10 13 02.9	-01 36 53	0.000748	~	
8	2MASS J10134175-0211244	RG*	10 13 41.7632659656	-02 11 24.408856392	0.000805	~	
9	SDSS J101435.84-005401.4	*	10 14 35.8381053435	-00 54 01.402484394	~	~	
10	SDSS J101542.20-023838.6	*	10 15 42.2053663577	-02 38 38.656798540	~	~	
11	SDSS J101800.19-015521.4	*	10 18 00.1971433072	-01 55 21.474414688	~	~	
12	SDSS J101837.07-020936.2	*	10 18 37.0821905897	-02 09 36.27720366	~	~	
13	NAME UMi Galaxy	G	15 09 11.34	+67 12 51.7	-0.000823	~	
14	NAME Dra dSph	G	17 20 14.335	+57 55 16.39	-0.000970	~	
15	NAME Tuc III	G	23 56.6	-59 36	-0.000341	~	



SIMBAD is now updated

The analysis of the article is over for the DJIN team

Number of rows : 15

Hide Raw id



Show 100 entries

N [^]	Identifier	obj tags	obj count	raw id
1	NAME Sculptor Dwarf Galaxy	x	2	<i>Sculptor dSph</i>
2	NAME Reticulum II	x	1	<i>Reticulum II</i>
3	NAME LMC	x	1	<i>Large Magellanic Cloud</i>
4	NAME Carina dSph	x	2	<i>Carina</i>
5	MGC 2663	scdx	28	<i>J1008+0001;Gaia DR3 3831812247731524608;J1008+001;SDSS J100801.54+000108.1</i>
6	2MASS J10103984-0220079	dx	14	<i>J1010-0220;Gaia DR3 3828963348679468032;SDSS J101039.85-022007.8</i>
7	NAME Sextans dSph	tascx	80	<i>Sextans;Sextans dSph;Sextans Dwarf Spheroidal Galaxy;Sextans dwarf galaxy</i>
8	2MASS J10134175-0211244	d	4	<i>J1013-0211;Gaia DR3 3829054779943345536;SDSS J101341.76-021124.4</i>
9	SDSS J101435.84-005401.4	d	4	<i>J1014-0054;Gaia DR3 3830721875794075904;SDSS J101435.84-005401.4</i>
10	SDSS J101542.20-023838.6	dx	12	<i>J1015-0238;Gaia DR3 3828784987277714560;SDSS J101542.20-023838.6</i>
11	SDSS J101800.19-015521.4	dx	13	<i>J1018-0155;Gaia DR3 3830390720930784640;SDSS J101800.19-015521.4</i>
12	SDSS J101837.07-020936.2	dx	14	<i>J1018-0209;Gaia DR3 3830319390113933952;SDSS J101837.07-020936.2</i>
13	NAME UMi Galaxy	x	2	<i>Ursa Minor</i>
14	NAME Dra dSph	x	2	<i>Draco</i>
15	NAME Tuc III	x	1	<i>Tucana III</i>

DJIN adds **metadata** to the objects :

Obj tags → place in the article (title, abstract, keywords, text, table, caption ...)

Obj count → number occurrences of the object in the article

Raw id → the way(s) the object is written in the article

2023ApJ...954...55R - *Astrophys. J.*, 954, 55 (2023/September-1)

Abundance Analysis of Stars at Large Radius in the **Sextans Dwarf Spheroidal Galaxy**.

ROEDERER I.U., PACE A.B., PLACCO V.M., CALDWELL N., KOPOSOV S.E., MATEO M., OLSZEWSKI E.W. and WALKER M.G.

All metadata can be updated/changed if necessary

Raw Id is used in SIMBAD to make objects in titles clickable


The Raw Ids have become an essential part of **objects identification**

NAME Sextans dSph

Positions:

- Title
- Keyword
- Abstract
- Subtitle
- Text
- Caption
- Table
- Figure
- Calibrator
- Not explicit

Raw Id	Nb
Sextans dwarf galaxy	1
Sextans	72
Sextans dSph	5
Sextans Dwarf Spheroidal Galaxy	2



Instruction:
o NAME Sextans dSph, +tasxc, +Sextans;Sextans dSph;Se...

OK Cancel

Sort references on where and how often the object is cited
trying to find the most relevant references on this object.

More on score

Show 100 entries

Search:

Bibcode/DOI	Score	in Title Abstract Keywords	in a table	in teXt, Caption, ...	Nb occurrence	Nb objects in ref	Citations (from ADS)	Title
2011MNRAS.411.1013B	6136	T K A		X C	157	187	143	Study of the Sextans dwarf s
2019AJ...157...35V	5789	T K A	D	S X C	134	234	2	The population of Sextans dwarf sp
2018A&A...609A...53C	5124	T K A		X C	121	1597	15	Tracing the stella Sextans.
2018MNRAS.473.4064C	4724	T K A	D	S X C F	110	12	12	Proper motion of Sextans dwarf g
2023ApJ...954...55R	4130	T A		S X C	80	15	-	Abundance Analy Sextans Dwarf S
2016MNRAS.460...30R	3900	T K A	D	S X C	94	8	12	Structural analys Sextans dwarf s
2019ApJ...878...152L	3278	A	D	S X C	76	12	-	Cold, old, and me
2022MNRAS.511.4316A	2892	A	D	S X C	61	8	-	Constraining the
2020A&A...642A.176T	2812	T A		S X C	62	118	21	The chemical evo Sextans.
2022MNRAS.509.3626M	2752	T A	D	X C	58	18	7	The formation of Sextans galaxy.
2011A&A...531A.152L	2631	A	D	S X C	67	15	17	Spectroscopic ver
2018MNRAS.476...71B	2343	T K A	D	S X C F	53	4	9	The star formatio Sextans dwarf s
2017MNRAS.467...20B0	2224	T K A	D	X C F	52	10	15	Population gradie Sextans dSph: c
2018MNRAS.400...251C	2074	T K A		X C	48	7	12	Appearances can Sextans dSph.
2013MNRAS.433.2749G	1931	A	D	S X C	48	14	110	Unveiling the cor
2010A&A...524A...58T	1791	T A		X C	45	45	138	Extremely metal-
2009A&A...502...569A	1740	T K A		X C	44	23	88	Chemical compos Sextans dwarf sp
2014A&A...564A.112N	1725		D	X C	43	6	12	Gravitational tide
2020ApJS...247...7H	1480	T A		X C	33	5	-	Narrowband Ca p Sextans, and Cai
2012A&A...539A.123B	1404	A	D	S X C	35	23	20	Cleaning spectros
2014ApJ...781...22Z	1374	K A		S X C	33	1393	41	La Silla QUEST R
2011ApJ...727...78K	1358	A	D	S X C	34	28	270	Multi-element ab
2022MNRAS.512.5601O	1353	A	D	S X C F	27	12	10	Stellar proper mo
2016A&A...508A...21R	1341	A	D	X C	33	14	17	Computational is
2008MNRAS.387.1401A	1290	A	D	S X C F	32	16	83	Dwarf spheroidal
2013ApJ...779...116M	1260	A	D	X C	32	5	18	Binary population Sextans dwarf sp
2015ApJ...799...230H	1125	A	D	X C	28	6	9	A new chemical e
2009ApJ...703...692L	1092	T A		X C F	26	11	29	Star formation hi
2009A&A...501...189R	1073	A	D	S X C	27	10	112	The dynamical an
2020A&A...636A.111A	1071	T A		X	24	44	-	Chemical abunda Sextans dwarf s

References (825 between 1850 and 2023) (Total 825)

Simbad bibliographic survey began in 1850 for stars (at least bright stars) and in 1983 for all other objects (outside the solar system)

Follow new references on this object

Reference summaries :

from: 1850 to: \$currentYear

Display or select by : (not exhaustive, explanation here) in table Title|Abstract|KeyWord **Score**

obj count and obj tags together
create a **score** for one object in one
article

This score is used to **sort references**
of an object by **relevance**



SN 2023ixf in Messier 101: A Variable Red Supergiant as the Progenitor Candidate to a

KILPATRICK C.D., FOLEY R.J., JACOBSON-GALAN W.V., PIRO A.L., SMARTT S.J., DROUT M.R., GAGLIANO A., GALL C., HJORTH J., JONES D.O., A. RUIZ E., RANSOME C.L., VILLAR V.A., COULTER D.A., GAO H., MATTHEWS D.J., TAGGART K. and ZENATI Y.

Abstract (from CDS):

We present preexplosion optical and infrared (IR) imaging at the site of the type II supernova (SN II) 2023ixf in Messier 101 at 6.9 Mpc. We astr ground-based image of SN 2023ixf to archival Hubble Space Telescope (HST), Spitzer Space Telescope (Spitzer), and ground-based near-IR ima detected at a position consistent with the SN at wavelengths ranging from HST R band to Spitzer 4.5 μm . Fitting with blackbody and red superg distributions (SEDs), we find that the source is anomalously cool with a significant mid-IR excess. We interpret this SED as reprocessed emissio shell of dusty material with a mass $\sim 5 \times 10^{-5} M_{\odot}$ surrounding a $\log(L/L_{\odot}) = 4.74 \pm 0.07$ and $T_{\text{eff}} = 3920^{+200}_{-160}$ K RSG. This luminosity is consistent v $11 M_{\odot}$, depending on assumptions of rotation and overshooting. In addition, the counterpart was significantly variable in preexplosion Spitzer 3 exhibiting $\sim 70\%$ variability in both bands correlated across 9 yr and 29 epochs of imaging. The variations appear to have a timescale of 2.8 yr, v κ -mechanism pulsations observed in RSGs, albeit with a much larger amplitude than RSGs such as α Orionis (Betelgeuse).

Abstract Copyright: © 2023. The Author(s). Published by the American Astronomical Society.

Journal keyword(s): Stellar evolution - Type II supernovae

Status at CDS: Large table(s) will be appraised for possible ingestion in Vizier.

Simbad objects: 27

Commentaire privé:
=E= tables 1 et 2 + voir footnote 27 + data behind figure 3 -MN-09.08.23

► Full paper

► View the references in ADS

Number of rows : 27

Hide Raw id

Show 100 entries

N°	Identifier	obj tags	obj count	raw id	Otype	ICRS (J2000) RA	ICRS (J2000) DEC	Redshift	Sp
1	M 31	x	1	M31	G	00 42 44.330	+41 16 07.50	-0.001000	~
2	M 33	x	1	M33	GiG	01 33 50.8965749232	+30 39 36.630403128	-0.000598	~
3	SN 2003gd	x	1	SNe 2003gd	SN*	01 36 42.65	+15 44 19.9	0.00219	SNII
4	SN 2012ec	x	1	SN 2012ec	SN*	02 45 59.89	-07 34 25.0	0.005	SNII
5	SN 2022acko	x	1	SN 2022acko	SN*	03 19 38.990	-19 23 42.68	0.005264	SNII
6	SN 2009kr	x	1	SN 2009kr	SN*	05 12 03.30	-15 41 52.2	0.006	SNII
7	NAME LMC	x	2	LMC	G	05 23 34.6	-69 45 22	0.000875	~
8	* alf Ori	acx	10	Betelgeuse; α Orionis	s*r	05 55 10.30536	+07 24 25.4304	0.000073	M1-M2I
9	V* VY CMa	x	2	VY CMa	s*r	07 22 58.3261352189	-25 46 03.194390594	0.000187	M5Iae
10	SN 2012A	x	1	SN 2012A	SN*	10 25 07.39	+17 09 14.6	0.0025	SNII
11	SN 2012aw	x	1	SN 2012aw	SN*	10 43 53.735	+11 40 17.63	0.0026	SNII
12	SN 2009md	x	1	SN 2009md	SN*	10 48 26.28	+12 32 02.8	0.0044	SNII
13	SN 2009hd	x	1	SN 2009hd	SN*	11 20 16.99	+12 58 46.3	~	SNII
14	SN 2016cok	x	2	SN 2016cok	SN*	11 20 19.09	+12 58 57.2	0.00243	SNII

Journal : ApJ Volume : 952 Bibcode : 2023ApJ...952L..23K

32 object names (120)

- ☛ Betelgeuse (8)
- ☛ data behind figure (1)
- ☛ LMC (2)
- ☛ M101 (9)
- ☛ M31 (1)
- ☛ M33 (1)
- ☛ machine-readable (6)
- ☛ Messier 101 (3)
- ☛ NGC 6946 (1)
- ☛ NML Cyg (1)
- ☛ SN 2004A (1)
- ☛ SN 2004et (1)
- ☛ SN 2005cs (1)
- ☛ SN 2006my (1)
- ☛ SN 2008bk (1)
- ☛ SN 2009hd (1)
- ☛ SN 2009kr (1)
- ☛ SN 2009md (1)
- ☛ SN 2012A (1)
- ☛ SN 2012aw (1)
- ☛ SN 2012ec (1)
- ☛ SN 2016cok (2)
- ☛ SN 2017eaw (3)
- ☛ SN 2018aoo (1)
- ☛ SN 2020fo (1)
- ☛ SN 2022acko (1)
- ☛ SN 2023ixf (2)
- ☛ SN 2023ixf (59)
- ☛ SNe 2003gd (1)
- ☛ VV Cephei (2)
- ☛ VY CMa (2)
- ☛ α Orionis (2)

source=XCDs

SN 2023ixf in Messier 101: A Variable Red Supergiant as the Progenitor Candidate to a Type II Supernova

Charles D. Kilpatrick, Ryan J. Foley, Wynn V. Jacobson-Galán, Anthony L. Piro, Stephen J. Smartt, Maria R. Drout, Alexander Gagliano, Christa Gall, Jens Hjorth, David O. Jones, Kaisey S. Mandel, Raffaella Margutti, Enrico Ramirez-Ruiz, Conor L. Ransome, V. Ashley Villar, David A. Coulter, Hua Gao, David Jacob Matthews, Kirsty Taggart, Yossef Zenati.

Abstract

We present preexplosion optical and infrared (IR) imaging at the site of the type II supernova (SN II) 2023ixf in Messier 101 at 6.9 Mpc. We astrometrically registered a ground-based image of SN 2023ixf to archival Hubble Space Telescope (HST), Spitzer Space Telescope (Spitzer), and ground-based near-IR images. A single point source is detected at a position consistent with the SN at wavelengths ranging from HST R band to Spitzer 4.5 μm . Fitting with blackbody and red supergiant (RSG) spectral energy distributions (SEDs), we find that the source is anomalously cool with a significant mid-IR excess. We interpret this SED as reprocessed emission in a $800 R_{\odot}$ circumstellar shell of dusty material with a mass $\sim 5 \times 10^{-5} M_{\odot}$ surrounding a $\log(L/L_{\odot}) = 4.74 \pm 0.07$ and $T_{\text{eff}} = 3920^{+200}_{-160}$ K RSG. This luminosity is consistent with RSG models of initial mass $11 M_{\odot}$, depending on assumptions of rotation and overshooting. In addition, the counterpart was significantly variable in preexplosion Spitzer 3.6 and 4.5 μm imaging, exhibiting $\sim 70\%$ variability in both bands correlated across 9 yr and 29 epochs of imaging. The variations appear to have a timescale of 2.8 yr, which is consistent with κ -mechanism pulsations observed in RSGs, albeit with a much larger amplitude than RSGs such as α Orionis (Betelgeuse).

Keywords

Stellar evolution
Type II supernovae

Supporting material : [data behind figure](#), [machine-readable tables](#) (see [Table 1](#), [Table 2](#), [Figure 3](#).)

1. Introduction

All hydrogen-rich supernovae (SN II) with directly identified progenitor stars have been interpreted to come from systems with initial mass $< 20 M_{\odot}$ (Smartt 2015). With the exception of the blue supergiant progenitor of the peculiar SN II 1987A (Hillebrandt et al. 1987; Arnett et al. 1989), the yellow supergiant progenitor stars of hydrogen-poor SNe I Ib (e.g., Aldering et al. 1994), and the luminous blue variable (LBV) progenitor stars to SNe IIn (e.g., Gal-Yam & Leonard 2009), all of these systems are red supergiants (RSGs). These stars have massive, extended, hydrogen envelopes and make up the majority of directly identified progenitor stars to core-collapse SNe (SNe 2005gd, SNe 2005cs, SNe 2005kf, SNe 2005ip, SNe 2005j, SNe 2005k, SNe 2005l, SNe 2005m, SNe 2005n, SNe 2005o, SNe 2005p, SNe 2005q, SNe 2005r, SNe 2005s, SNe 2005t, SNe 2005u, SNe 2005v, SNe 2005w, SNe 2005x, SNe 2005y, SNe 2005z, SNe 2005aa, SNe 2005ab, SNe 2005ac, SNe 2005ad, SNe 2005ae, SNe 2005af, SNe 2005ag, SNe 2005ah, SNe 2005ai, SNe 2005aj, SNe 2005ak, SNe 2005al, SNe 2005am, SNe 2005an, SNe 2005ao, SNe 2005ap, SNe 2005aq, SNe 2005ar, SNe 2005as, SNe 2005at, SNe 2005au, SNe 2005av, SNe 2005aw, SNe 2005ax, SNe 2005ay, SNe 2005az, SNe 2005ba, SNe 2005bb, SNe 2005bc, SNe 2005bd, SNe 2005be, SNe 2005bf, SNe 2005bg, SNe 2005bh, SNe 2005bi, SNe 2005bj, SNe 2005bk, SNe 2005bl, SNe 2005bm, SNe 2005bn, SNe 2005bo, SNe 2005bp, SNe 2005bq, SNe 2005br, SNe 2005bs, SNe 2005bt, SNe 2005bu, SNe 2005bv, SNe 2005bw, SNe 2005bx, SNe 2005by, SNe 2005bz, SNe 2005ca, SNe 2005cb, SNe 2005cc, SNe 2005cd, SNe 2005ce, SNe 2005cf, SNe 2005cg, SNe 2005ch, SNe 2005ci, SNe 2005cj, SNe 2005ck, SNe 2005cl, SNe 2005cm, SNe 2005cn, SNe 2005co, SNe 2005cp, SNe 2005cq, SNe 2005cr, SNe 2005cs, SNe 2005ct, SNe 2005cu, SNe 2005cv, SNe 2005cw, SNe 2005cx, SNe 2005cy, SNe 2005cz, SNe 2005da, SNe 2005db, SNe 2005dc, SNe 2005dd, SNe 2005de, SNe 2005df, SNe 2005dg, SNe 2005dh, SNe 2005di, SNe 2005dj, SNe 2005dk, SNe 2005dl, SNe 2005dm, SNe 2005dn, SNe 2005do, SNe 2005dp, SNe 2005dq, SNe 2005dr, SNe 2005ds, SNe 2005dt, SNe 2005du, SNe 2005dv, SNe 2005dw, SNe 2005dx, SNe 2005dy, SNe 2005dz, SNe 2005ea, SNe 2005eb, SNe 2005ec, SNe 2005ed, SNe 2005ee, SNe 2005ef, SNe 2005eg, SNe 2005eh, SNe 2005ei, SNe 2005ej, SNe 2005ek, SNe 2005el, SNe 2005em, SNe 2005en, SNe 2005eo, SNe 2005ep, SNe 2005eq, SNe 2005er, SNe 2005es, SNe 2005et, SNe 2005eu, SNe 2005ev, SNe 2005ew, SNe 2005ex, SNe 2005ey, SNe 2005ez, SNe 2005fa, SNe 2005fb, SNe 2005fc, SNe 2005fd, SNe 2005fe, SNe 2005ff, SNe 2005fg, SNe 2005fh, SNe 2005fi, SNe 2005fj, SNe 2005fk, SNe 2005fl, SNe 2005fm, SNe 2005fn, SNe 2005fo, SNe 2005fp, SNe 2005fq, SNe 2005fr, SNe 2005fs, SNe 2005ft, SNe 2005fu, SNe 2005fv, SNe 2005fw, SNe 2005fx, SNe 2005fy, SNe 2005fz, SNe 2005ga, SNe 2005gb, SNe 2005gc, SNe 2005gd, SNe 2005ge, SNe 2005gf, SNe 2005gg, SNe 2005gh, SNe 2005gi, SNe 2005gj, SNe 2005gk, SNe 2005gl, SNe 2005gm, SNe 2005gn, SNe 2005go, SNe 2005gp, SNe 2005gq, SNe 2005gr, SNe 2005gs, SNe 2005gt, SNe 2005gu, SNe 2005gv, SNe 2005gw, SNe 2005gx, SNe 2005gy, SNe 2005gz, SNe 2005ha, SNe 2005hb, SNe 2005hc, SNe 2005hd, SNe 2005he, SNe 2005hf, SNe 2005hg, SNe 2005hh, SNe 2005hi, SNe 2005hj, SNe 2005hk, SNe 2005hl, SNe 2005hm, SNe 2005hn, SNe 2005ho, SNe 2005hp, SNe 2005hq, SNe 2005hr, SNe 2005hs, SNe 2005ht, SNe 2005hu, SNe 2005hv, SNe 2005hw, SNe 2005hx, SNe 2005hy, SNe 2005hz, SNe 2005ia, SNe 2005ib, SNe 2005ic, SNe 2005id, SNe 2005ie, SNe 2005if, SNe 2005ig, SNe 2005ih, SNe 2005ii, SNe 2005ij, SNe 2005ik, SNe 2005il, SNe 2005im, SNe 2005in, SNe 2005io, SNe 2005ip, SNe 2005iq, SNe 2005ir, SNe 2005is, SNe 2005it, SNe 2005iu, SNe 2005iv, SNe 2005iw, SNe 2005ix, SNe 2005iy, SNe 2005iz, SNe 2005ja, SNe 2005jb, SNe 2005jc, SNe 2005jd, SNe 2005je, SNe 2005jf, SNe 2005jg, SNe 2005jh, SNe 2005ji, SNe 2005jj, SNe 2005jk, SNe 2005jl, SNe 2005jm, SNe 2005jn, SNe 2005jo, SNe 2005jp, SNe 2005jq, SNe 2005jr, SNe 2005js, SNe 2005jt, SNe 2005ju, SNe 2005jv, SNe 2005jw, SNe 2005jx, SNe 2005jy, SNe 2005jz, SNe 2005ka, SNe 2005kb, SNe 2005kc, SNe 2005kd, SNe 2005ke, SNe 2005kf, SNe 2005kg, SNe 2005kh, SNe 2005ki, SNe 2005kj, SNe 2005kl, SNe 2005km, SNe 2005kn, SNe 2005ko, SNe 2005kp, SNe 2005kq, SNe 2005kr, SNe 2005ks, SNe 2005kt, SNe 2005ku, SNe 2005kv, SNe 2005kw, SNe 2005kx, SNe 2005ky, SNe 2005kz, SNe 2005la, SNe 2005lb, SNe 2005lc, SNe 2005ld, SNe 2005le, SNe 2005lf, SNe 2005lg, SNe 2005lh, SNe 2005li, SNe 2005lj, SNe 2005lk, SNe 2005ll, SNe 2005lm, SNe 2005ln, SNe 2005lo, SNe 2005lp, SNe 2005lq, SNe 2005lr, SNe 2005ls, SNe 2005lt, SNe 2005lu, SNe 2005lv, SNe 2005lw, SNe 2005lx, SNe 2005ly, SNe 2005lz, SNe 2005ma, SNe 2005mb, SNe 2005mc, SNe 2005md, SNe 2005me, SNe 2005mf, SNe 2005mg, SNe 2005mh, SNe 2005mi, SNe 2005mj, SNe 2005mk, SNe 2005ml, SNe 2005mm, SNe 2005mn, SNe 2005mo, SNe 2005mp, SNe 2005mq, SNe 2005mr, SNe 2005ms, SNe 2005mt, SNe 2005mu, SNe 2005mv, SNe 2005mw, SNe 2005mx, SNe 2005my, SNe 2005mz, SNe 2005na, SNe 2005nb, SNe 2005nc, SNe 2005nd, SNe 2005ne, SNe 2005nf, SNe 2005ng, SNe 2005nh, SNe 2005ni, SNe 2005nj, SNe 2005nk, SNe 2005nl, SNe 2005nm, SNe 2005nn, SNe 2005no, SNe 2005np, SNe 2005nq, SNe 2005nr, SNe 2005ns, SNe 2005nt, SNe 2005nu, SNe 2005nv, SNe 2005nw, SNe 2005nx, SNe 2005ny, SNe 2005nz, SNe 2005oa, SNe 2005ob, SNe 2005oc, SNe 2005od, SNe 2005oe, SNe 2005of, SNe 2005og, SNe 2005oh, SNe 2005oi, SNe 2005oj, SNe 2005ok, SNe 2005ol, SNe 2005om, SNe 2005on, SNe 2005oo, SNe 2005op, SNe 2005oq, SNe 2005or, SNe 2005os, SNe 2005ot, SNe 2005ou, SNe 2005ov, SNe 2005ow, SNe 2005ox, SNe 2005oy, SNe 2005oz, SNe 2005pa, SNe 2005pb, SNe 2005pc, SNe 2005pd, SNe 2005pe, SNe 2005pf, SNe 2005pg, SNe 2005ph, SNe 2005pi, SNe 2005pj, SNe 2005pk, SNe 2005pl, SNe 2005pm, SNe 2005pn, SNe 2005po, SNe 2005pp, SNe 2005pq, SNe 2005pr, SNe 2005ps, SNe 2005pt, SNe 2005pu, SNe 2005pv, SNe 2005pw, SNe 2005px, SNe 2005py, SNe 2005pz, SNe 2005qa, SNe 2005qb, SNe 2005qc, SNe 2005qd, SNe 2005qe, SNe 2005qf, SNe 2005qg, SNe 2005qh, SNe 2005qi, SNe 2005qj, SNe 2005qk, SNe 2005ql, SNe 2005qm, SNe 2005qn, SNe 2005qo, SNe 2005qp, SNe 2005qq, SNe 2005qr, SNe 2005qs, SNe 2005qt, SNe 2005qu, SNe 2005qv, SNe 2005qw, SNe 2005qx, SNe 2005qy, SNe 2005qz, SNe 2005ra, SNe 2005rb, SNe 2005rc, SNe 2005rd, SNe 2005re, SNe 2005rf, SNe 2005rg, SNe 2005rh, SNe 2005ri, SNe 2005rj, SNe 2005rk, SNe 2005rl, SNe 2005rm, SNe 2005rn, SNe 2005ro, SNe 2005rp, SNe 2005rq, SNe 2005rr, SNe 2005rs, SNe 2005rt, SNe 2005ru, SNe 2005rv, SNe 2005rw, SNe 2005rx, SNe 2005ry, SNe 2005rz, SNe 2005sa, SNe 2005sb, SNe 2005sc, SNe 2005sd, SNe 2005se, SNe 2005sf, SNe 2005sg, SNe 2005sh, SNe 2005si, SNe 2005sj, SNe 2005sk, SNe 2005sl, SNe 2005sm, SNe 2005sn, SNe 2005so, SNe 2005sp, SNe 2005sq, SNe 2005sr, SNe 2005ss, SNe 2005st, SNe 2005su, SNe 2005sv, SNe 2005sw, SNe 2005sx, SNe 2005sy, SNe 2005sz, SNe 2005ta, SNe 2005tb, SNe 2005tc, SNe 2005td, SNe 2005te, SNe 2005tf, SNe 2005tg, SNe 2005th, SNe 2005ti, SNe 2005tj, SNe 2005tk, SNe 2005tl, SNe 2005tm, SNe 2005tn, SNe 2005to, SNe 2005tp, SNe 2005tq, SNe 2005tr, SNe 2005ts, SNe 2005tt, SNe 2005tu, SNe 2005tv, SNe 2005tw, SNe 2005tx, SNe 2005ty, SNe 2005tz, SNe 2005ua, SNe 2005ub, SNe 2005uc, SNe 2005ud, SNe 2005ue, SNe 2005uf, SNe 2005ug, SNe 2005uh, SNe 2005ui, SNe 2005uj, SNe 2005uk, SNe 2005ul, SNe 2005um, SNe 2005un, SNe 2005uo, SNe 2005up, SNe 2005uq, SNe 2005ur, SNe 2005us, SNe 2005ut, SNe 2005uu, SNe 2005uv, SNe 2005uw, SNe 2005ux, SNe 2005uy, SNe 2005uz, SNe 2005va, SNe 2005vb, SNe 2005vc, SNe 2005vd, SNe 2005ve, SNe 2005vf, SNe 2005vg, SNe 2005vh, SNe 2005vi, SNe 2005vj, SNe 2005vk, SNe 2005vl, SNe 2005vm, SNe 2005vn, SNe 2005vo, SNe 2005vp, SNe 2005vq, SNe 2005vr, SNe 2005vs, SNe 2005vt, SNe 2005vu, SNe 2005vv, SNe 2005vw, SNe 2005vx, SNe 2005vy, SNe 2005vz, SNe 2005wa, SNe 2005wb, SNe 2005wc, SNe 2005wd, SNe 2005we, SNe 2005wf, SNe 2005wg, SNe 2005wh, SNe 2005wi, SNe 2005wj, SNe 2005wk, SNe 2005wl, SNe 2005wm, SNe 2005wn, SNe 2005wo, SNe 2005wp, SNe 2005wq, SNe 2005wr, SNe 2005ws, SNe 2005wt, SNe 2005wu, SNe 2005wv, SNe 2005ww, SNe 2005wx, SNe 2005wy, SNe 2005wz, SNe 2005xa, SNe 2005xb, SNe 2005xc, SNe 2005xd, SNe 2005xe, SNe 2005xf, SNe 2005xg, SNe 2005xh, SNe 2005xi, SNe 2005xj, SNe 2005xk, SNe 2005xl, SNe 2005xm, SNe 2005xn, SNe 2005xo, SNe 2005xp, SNe 2005xq, SNe 2005xr, SNe 2005xs, SNe 2005xt, SNe 2005xu, SNe 2005xv, SNe 2005xw, SNe 2005xx, SNe 2005xy, SNe 2005xz, SNe 2005ya, SNe 2005yb, SNe 2005yc, SNe 2005yd, SNe 2005ye, SNe 2005yf, SNe 2005yg, SNe 2005yh, SNe 2005yi, SNe 2005yj, SNe 2005yk, SNe 2005yl, SNe 2005ym, SNe 2005yn, SNe 2005yo, SNe 2005yp, SNe 2005yq, SNe 2005yr, SNe 2005ys, SNe 2005yt, SNe 2005yu, SNe 2005yv, SNe 2005yw, SNe 2005yx, SNe 2005yy, SNe 2005yz, SNe 2005za, SNe 2005zb, SNe 2005zc, SNe 2005zd, SNe 2005ze, SNe 2005zf, SNe 2005zg, SNe 2005zh, SNe 2005zi, SNe 2005zj, SNe 2005zk, SNe 2005zl, SNe 2005zm, SNe 2005zn, SNe 2005zo, SNe 2005zp, SNe 2005zq, SNe 2005zr, SNe 2005zs, SNe 2005zt, SNe 2005zu, SNe 2005zv, SNe 2005zw, SNe 2005zx, SNe 2005zy, SNe 2005zz

DJINT

The logo for DJINT is presented in a bold, black, sans-serif font with a white outline. The word is positioned horizontally across the center. The letter 'I' is lowercase, while 'D', 'J', 'N', and 'T' are uppercase. The final letter, 'T', is replaced by a red pencil tip pointing downwards and to the left. Behind the text, there are several curved, brushstroke-like lines in shades of red and orange, creating a sense of motion and energy. The entire graphic is set against a dark, starry background with a subtle nebula or galaxy pattern.