



# **Gaia Data Release 3**

## **Contenidos, novedades y expectativas**

Francesca Figueras (ICCUB/IEEC)  
en nombre del Equipo Gaia-UB

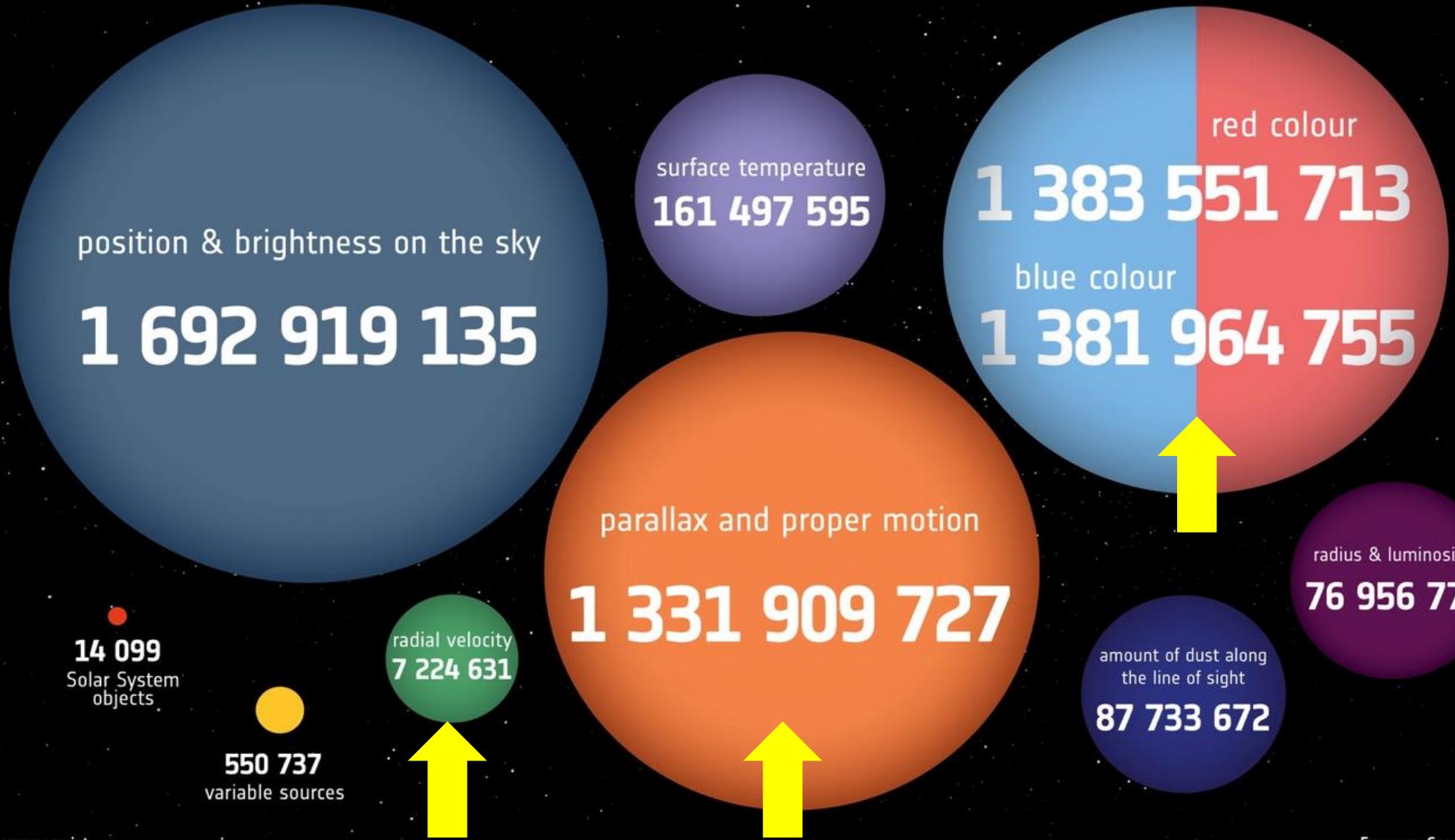
Brought to you by the  
Gaia Collaboration

Airbus Space

ESA/Gaia/DPAC

# GAIA DATA RELEASE 2

25-abril-2018



# GAIA EARLY DATA RELEASE 3



3-diciembre-2020

**1 811 709 771**  
stellar positions

**1 806 254 432**  
brightness  
in white light

**1 542 033 472**  
brightness  
in blue light

**1 540 770 489**  
colour

**1 467 744 818**  
parallax and  
proper motions

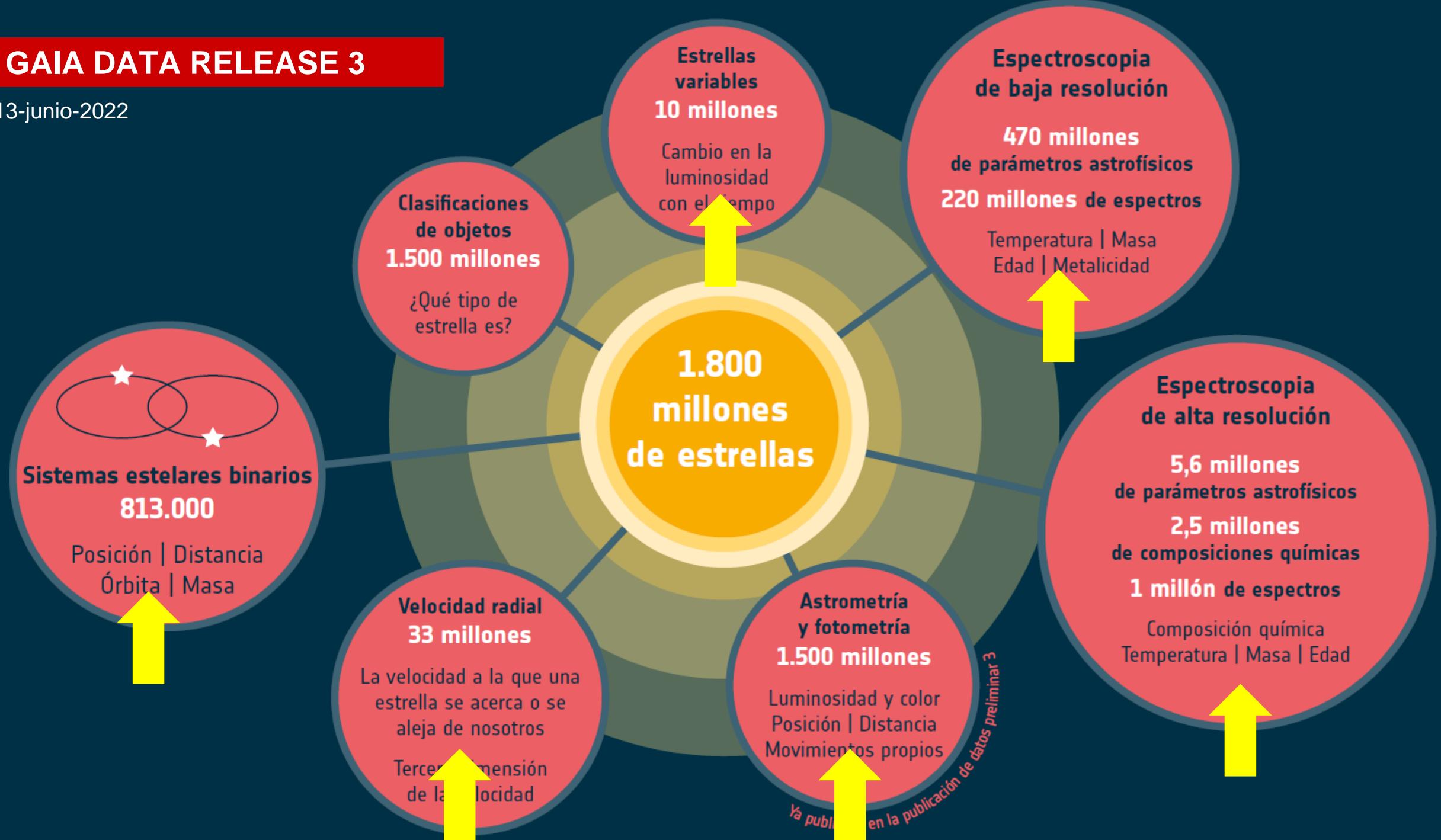
**1 614 173**  
extragalactic  
sources

**1 554 997 939**  
brightness  
in red light



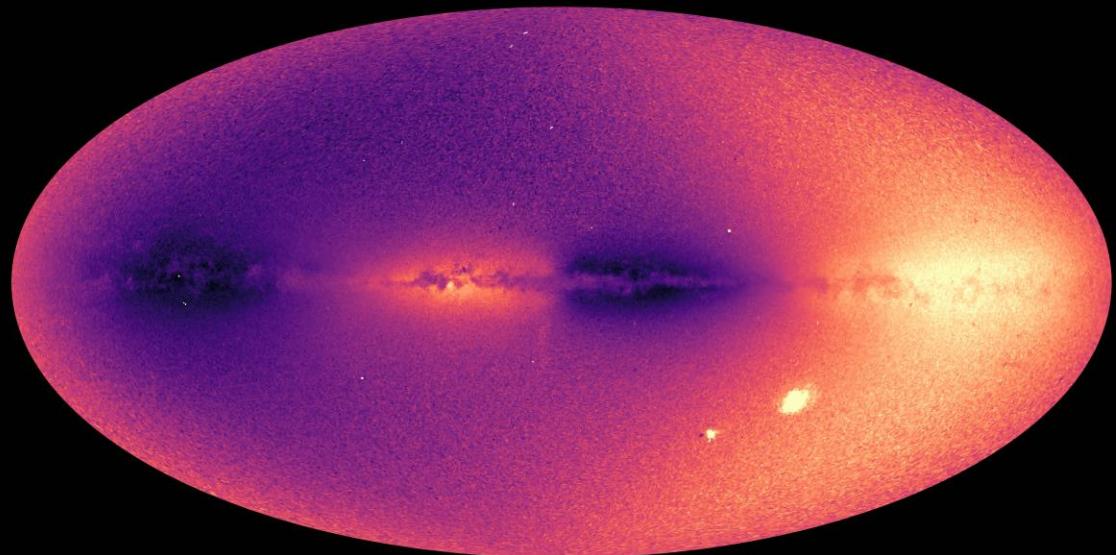
# GAIA DATA RELEASE 3

13-junio-2022

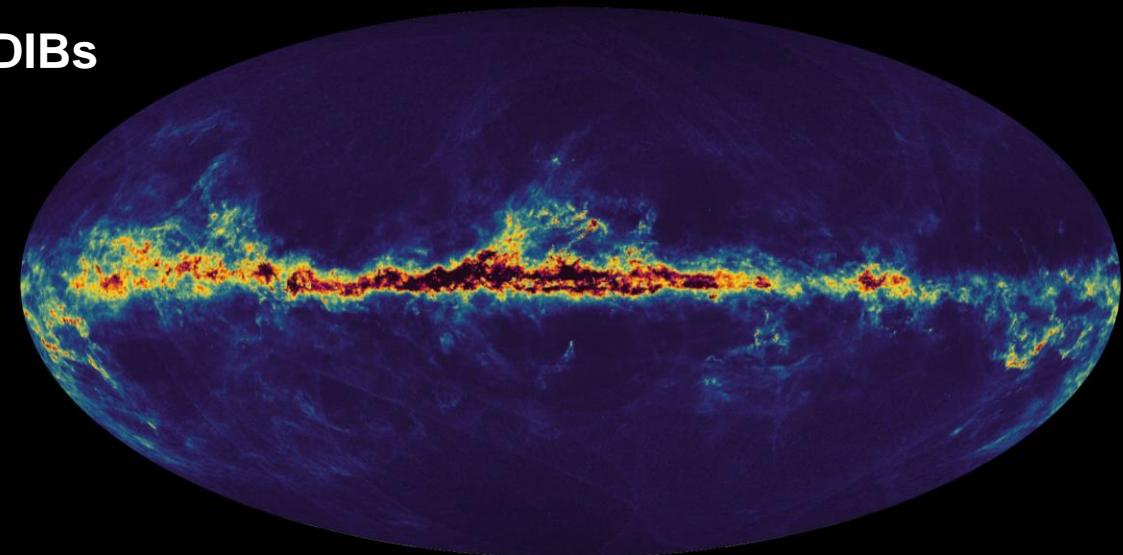


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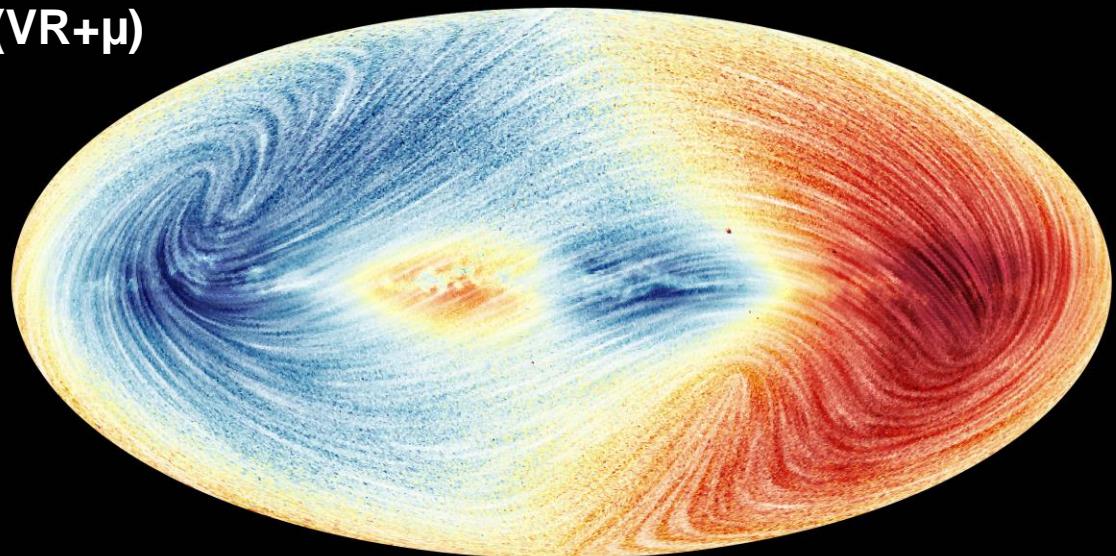
VR



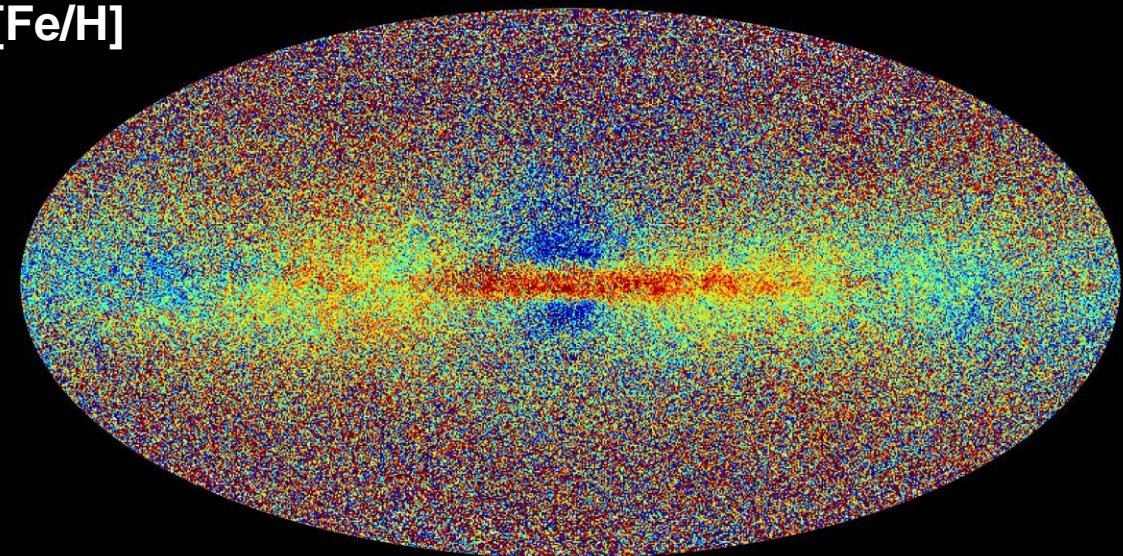
DIBs



3D (VR+ $\mu$ )



[Fe/H]



# Gaia DR3 papers (45)

## Summary paper (1)

Contents and survey properties

## PV papers (9)

overview of the science potential

# PROCESSING papers (35)

Complementary to the Gaia DR3 documentation

## Catalogue Validation (1)

## BP/RP spectra (2)

Processing, external calibration

## RVS spectra and radial velocities (6)

RV processing, RV Hot-star, line broadering, mean RVS spectra, magnitude GRVS , RV of double lined spectra

## Astrophysical parameters (6)

Overview, stellar parameters, non-stellar content, chromospheric activity and mass accretion, Stellar parametrizer from photometry, and from spectroscopy module

## Non-single stars (4)

Processing: eclipsing binary, spectroscopic binary, astrometric binary and with MCMC and GA

## Variable stars (13)

Processing, classification, Cross-match with literature, ellipsoidal variables (NS, BH), solar like, YSO candidates, LPVs, eclipsing binaries, RR-lyrae, Cepheids, AGN, microlensing events, Scan-angle dependent signals

## Galaxies and host galaxies of QSO (1)

## Solar system objects (1)

## Gaia Andromeda photometric Survey (1)

# DR3 - Performance verification papers



## **Mapping the asymmetric disc of the Milky Way**

Gaia Collaboration, Drimmel, R., et al.

## **Pulsations in main-sequence OBAF stars**

Gaia Collaboration, De Ridder, J., et al.

## **Reflectance spectra of solar system small bodies**

Gaia Collaboration, Galluccio, L., et al.

## **The Galaxy in your preferred colours. Synthetic photometry from Gaia low-resolution spectra**

Gaia Collaboration, Montegriffo, P., et al.

## **Stellar multiplicity, a teaser for the hidden treasure**

Gaia Collaboration, Arenou, F., et al.



## **The extragalactic content**

Gaia Collaboration, Bailer-Jones, C.A.L., et al.



## **Chemical cartography of the Milky Way**

Gaia Collaboration, Recio-Blanco, A., et al.



## **Golden Sample of Astrophysical Parameters**

Gaia Collaboration, Creevey, O.L., et al.

## **Exploring and mapping the diffuse interstellar bands**

Gaia Collaboration, Schultheis, M., et al.

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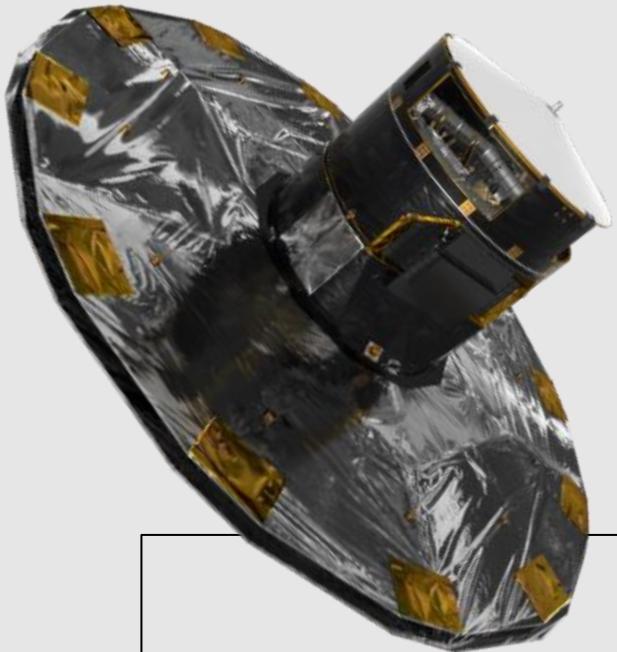
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Como se ha demostrado en anteriores entregas,  
**los descubrimientos más inesperados y espectaculares**  
**Ilegarán en las próximas semanas**, en cuanto empiezemos a  
distinguir los secretos que atesoran estos datos