

OUTREACH FOR GAIA

EDUCATIONAL PRACTICES USING GAIA DATABASE

Visualisation of the Milky Way in 3D (and animation)

Positions + Motion + Spectra

Stars (and the Sun) are moving (MW rotation, binarities, ...)

Shape & structure of the Milky Way

Comparing Gaia

Comparison with models & simulations

Comparison with former catalogues (historical evolution of the Galaxy map: number of sources & precision)

Joining Gaia with other catalogues (multiwavelength)

Comparison of the sky as seen from a big city (light pollution), eye limit and Gaia.

Selecting the sample (position, color, motion criteria...)

Clusters

Galaxies

Moving groups

QSO

Binaries

Solar system objects

Deriving distances

Astrometrically (Parallaxes)

Photometrically (Cepheids)

Redshift (QSO redshift from CU8)

Interstellar extinction map

Change of spectra when varying astrophysical parameters

Temperature

Gravity

Metallicity

Redshift

Computing absolute magnitudes

Building an HR diagram of the Milky Way

Going back Milky Way history

Science alerts lightcurves

Orbital parameters determination

Multiple systems

Solar system objects

From raw images to science

Following the calibration chain. See data at different stages.

Evolution of computational requirements to deal with astronomical databases

Number of processors needed to access and deal with Gaia data?

Where is this data stored physically?

Following Gaia position (it is stored somewhere?) during the mission

Position in the sky in a given location of the Earth surface.

Position with respect Earth. Derive orbital parameters, mass of the satellite, ...

[MOBILE APPS](#)

[PLANETARIUM APP USING GAIA CATALOGUE](#)

[COURSES](#)

[Explaining the mission](#)

[Explaining the catalogue \(with examples\)](#)

[CONTESTS & WEB GAMES](#)

[NEWS](#)

[ABOUT THE MISSION](#)

[ABOUT THE SCIENCE](#)

[WEB PORTAL](#)

[Where is Gaia pointing right now?](#)

[Where is Gaia in the sky right now? GBOT?](#)

[Zoomable image of Milky Way](#)

[SCIENCE ALERTS](#)

[PRESS RELEASES](#)

[IMAGES & VIDEOS](#)

[IMAX & PLANETARIUMS](#)

[Trip to the Milky Way \(using Gaia Catalogue\) in 3D](#)

[Gaia instrument in 3D](#)

[TV DOCUMENTARY](#)

[Gaia Mission](#)

[Regular sections in TV & radio programs](#)

[IMAGES WITHOUT SOUND FOR PUBLIC PLACES PROJECTION](#)

[Solar array panel deployment](#)

[Gaia launch](#)

[Scanning law](#)

[SCALE MODELS & PAPER CRAFTS](#)

[Gaia satellite](#)

[3D constellations](#)

[The Milky Way](#)

[Rocket toy: Soyuz launcher & Gaia](#)

[BOOKS](#)

[Explaining the mission](#)

[Explaining the catalogue \(with examples\)](#)

[HISTORY OF STELLAR CATALOGUES](#)

[TALKS](#)

[EXHIBITIONS](#)

[Gaia. 1000 million of stars!](#)

[Our Galaxy. Big unknowns.](#)

[Distances to stars](#)

[Gaia mission](#)

[Gaia satellite](#)

[Industrial counterparts](#)

[COMIC STRIP](#)

[GAIA SATELLITE](#)

[THE MILKY WAY](#)

[HISTORY OF ASTROMETRY](#)

[WEB PORTAL WITH SCIENTIFIC PROJECTS ASSOCIATED TO GAIA DATA](#)

[PUBLISHED PAPERS](#)

[GROUND-BASED FOLLOW-UP PROJECTS](#)

[GREAT](#)