

HIGHLIGHT

Touch-Sky: alla scoperta del cielo con gli atlanti del passato e i satelliti del futuro

The national project "***Touch-Sky: alla scoperta del cielo con gli atlanti del passato e i satelliti del futuro***" will be financed thanks to the [ministerial competitive program \(L.6/2000\)](#) dedicated to the dissemination of scientific culture.

In the framework of the ***Touch-Sky project***, a selection of the historical atlases kept in INAF libraries will be identified in order to provide a coherent vision of the process that led to the development of the current scientific knowledge about the universe. The core of the project consists of a virtual exhibition that will retrace, through the ancient stellar and cartographic atlases preserved in the INAF libraries, the fundamental steps of scientific and technological development that led to the modern understanding of the cosmos and the nature of planets and stars.

The activities will be carried out in the "Points of Light", high-intensity educational spaces managed by Save the Children Italia, and will take place where the Observatories participating in this project are located (Catania, Firenze, Milano, Napoli, Padova, Palermo, Roma, Torino).

Project manager: Antonella Gasperini



J.E. Bode, Uranographia, 1801

REFEREED PUBLICATIONS

G. Agapito, F. Rossi, C. Plantet, A. Puglisi, E. Pinna

Advances in control of a Pyramid Single Conjugate Adaptive Optics system

Monthly Notices of the Royal Astronomical Society, in press

<http://arxiv.org/abs/2109.06144>

L. Magrini, R. Smiljanic, E. Franciosini, L. Pasquini, S. Randich, G. Casali, C. Viscasillas Vázquez, A. Bragaglia, L. Spina, K. Biazzo, G. Tautvaišiene T. Masseron, M. Van der Swaelmen, E. Pancino, F. Jiménez-Esteban, G. Guiglion, S. Martell, T. Bensby, V. D'Orazi, M. Baratella, A. Korn, P. Jofre, G. Gilmore, C. Worley, A. Hourihane, A. Gonneau, G. G. Sacco, L. Morbidelli

The Gaia-ESO survey: Lithium abundances in open cluster Red Clump stars

Astronomy & Astrophysics, in press

<https://ui.adsabs.harvard.edu/abs/2021arXiv210811677M/abstract>

I. Bešlić, A. T. Barnes, F. Bigiel, J. Puschig, J. Pety, C. Herrera Contreras, A. K. Leroy, A. Usero, E. Schinnerer, S. E. Meidt, E. Emsellem, A. Hughes, C. Faesi, K. Kreckel, F. M. C. Belfiore, M. Chevance, J. S. den Brok, C. Eibensteiner, S. C. O. Glover, K. Grasha, M. J. Jimenez-Donaire, R. S. Klessen, J. M. D. Kruijssen, D. Liu, I. Pessa, M. Querejeta, E. Rosolowsky, T. Saito, F. Santoro, A. Schrubba, M. C. Sormani, T. G. Williams

Dense molecular gas properties on 100 pc scales across the disc of NGC 3627

Monthly Notices of the Royal Astronomical Society (2021), 506, 1

<https://ui.adsabs.harvard.edu/abs/2021MNRAS.506..963B/abstract>

L. Colzi, V. M. Rivilla, M. T. Beltrán, I. Jiménez-Serra, C. Mininni, M. Melosso, R. Cesaroni, F. Fontani, A. Lorenzani, A. Sánchez-Monge, S. Viti, P. Schilke, L. Testi, E. R. Alonso, L. Kolesniková

The GUAPOS project

II. A comprehensive study of peptide-like bond molecules

<https://www.aanda.org/articles/aa/abs/2021/09/aa41573-21/aa41573-21.html>

Astronomy & Astrophysics (2021), 653, 45

Media INAF: <https://www.media.inaf.it/2021/09/24/chimica-prebiotica-mezzo-interstellare/>

A. Nersesian, W. Dobbels, E. M. Xilouris, M. Baes, S. Bianchi et al.

Probing the spectral shape of dust emission with the DustPedia galaxy sample

Monthly Notices of the Royal Astronomical Society (2021), 506, 3

<https://academic.oup.com/mnras/article-abstract/506/3/3986/6321847>

C. Mininni, F. Fontani, A. Sánchez-Monge, V. M. Rivilla, M. T. Beltrán, S. Zahorecz, K. Immer, A. Giannetti, P. Caselli, L. Colzi, L. Testi, D. Elia

The TOPGöt high-mass star-forming sample. I. Methyl cyanide emission as tracer of early phases of star formation

Astronomy & Astrophysics, in press

<https://arxiv.org/abs/2107.10741>

Yu Cheng, J.C. Tan, P. Caselli, L. Fissel, H. G. Arce, **F. Fontani**, M. D. Goodson, M. Liu, N. Galitzki

Star Formation in a Strongly Magnetized Cloud

Astrophysical Journal (2021), 916, 78

<https://arxiv.org/abs/2101.01326>

K. Chae, H. Desmond, **F. Lelli**, S.S. McGaugh, J.M. Schombert

Testing the Strong Equivalence Principle. II. Relating the External Field Effect in Galaxy Rotation Curves to the Large-Scale Structure of the Universe

Astrophysical Journal, in press

<https://ui.adsabs.harvard.edu/abs/2021arXiv210904745C/abstract>

S. S. McGaugh, **F. Lelli**, J. M. Schombert, P. Li, T. Visgaitis, K.S. Parker, M.S. Pawlowski

The Baryonic Tully-Fisher Relation in the Local Group and the Equivalent Circular Velocity of Pressure Supported Dwarfs

Astronomical Journal, in press

<https://ui.adsabs.harvard.edu/abs/2021arXiv210903251M/abstract>

S. S. McGaugh, **F. Lelli**, J. M. Schombert, P. Li, T. Visgaitis, K.S. Parker, M.S. Pawlowski

The Baryonic Tully-Fisher Relation in the Local Group and the Equivalent Circular Velocity of Pressure Supported Dwarfs

Astronomical Journal, in press

<https://ui.adsabs.harvard.edu/abs/2021arXiv210903251M/abstract>

O.I. Wong, A.R.H. Stevens, B.-Q. For, T. Westmeier, M. Dixon, S.-H. Oh, G.I.G. Jozsa, T.N. Reynolds, K. Lee-Waddell, J. Roman, L. Verdes-Montenegro, H.M. Courtois, D. Pomarede, C. Murugesan, M.T. Whiting, K. Bekki, F. Bigiel, A. Bosma, B. Catinella, H. Denes, A. Elagali, B.W. Holwerda, P. Kamphuis, V.A. Kilborn, D. Kleiner, B.S. Koribalski, **F. Lelli** et al.

WALLABY pre-pilot survey: two dark clouds in the vicinity of NGC 1395

Monthly Notices of the Royal Astronomical Society, in press

<https://ui.adsabs.harvard.edu/abs/2021MNRAS.507.2905W/abstract>

J. van Houdt, A. van der Wel, R. Bezanson, M. Franx, F. D'Eugenio, I. Barisic, E. F. Bell, **A. Gallazzi** et al.

Stellar Dynamical Models for 797 $z \sim 0.8$ Galaxies from LEGA-C

Astrophysical Journal, in press

<https://ui.adsabs.harvard.edu/abs/2021arXiv210808142V>

A. van der Wel, R. Bezanson, F. D'Eugenio, C. Straatman, M. Franx, J. van Houdt, M.V. Maseda, **A. Gallazzi**, P. Wu, C. Pacifici, I. Barisic, G. B. Brammer, J. Carlos Munoz-Mateos, S. Veralcke, **S. Zibetti** et al.

The Large Early Galaxy Astrophysics Census (LEGA-C) Data Release 3: 3000 High-Quality Spectra of K_s -selected galaxies at $z > 0.6$

Astrophysical Journal Supplement, in press

<https://ui.adsabs.harvard.edu/abs/2021arXiv210800744V>

N. Winkel, A. Pasquali, K. Kraljic, R. Smith, **A. R. Gallazzi**, T. M. Jackson

The imprint of cosmic web quenching on central galaxies

Monthly Notices of the Royal Astronomical Society (2021), 505, 4

<https://academic.oup.com/mnras/article/505/4/4920/6291202>

A.W. S. Man, J. Zabl, G. B. Brammer, J. Richard, S. Toft, M. Stockmann, **A. R. Gallazzi**, **S. Zibetti**, H. Ebeling
An exquisitely deep view of quenching galaxies through the gravitational lens: Stellar population, morphology, and ionized gas

Astrophysical Journal (in press)

<https://arxiv.org/abs/2106.08338>

N. Kumari, R. Maiolino, J. Trussler, **F. Mannucci**, **G. Cresci**, M. Curti, **A. Marconi**, **F. Belfiore**
The extension of the Fundamental Metallicity Relation beyond the BPT star-forming sequence: evidence for both gas accretion and starvation

Astronomy & Astrophysics, in press

<https://ui.adsabs.harvard.edu/abs/2021arXiv210812437K/abstract>

F. Fontanot, A. Calabrò, M. Talia, **F. Mannucci**, M. Castellano, **G. Cresci**, G. De Lucia, **A. Gallazzi** et al.
The evolution of the mass-metallicity relations from the VANDELS survey and the GAEA semi-analytic model

Monthly Notices of the Royal Astronomical Society (2021), 504, 3

<https://academic.oup.com/mnras/article-abstract/504/3/4481/6258419>

M. Benedettini, A. Traficante, **L. Olmi**, S. Pezzuto, A. Baldeschi, S. Molinari, D. Elia, E. Schisano, M. Merello, **F. Fontani**, K. L. J. Rygl, J. Brand, **M. T. Beltran**, R. Cesaroni, S. J. Liu, **L. Testi**

Molecular cloud catalogue from 13CO(1-0) data of the Forgotten Quadrant Survey

Astronomy & Astrophysics, in press

<https://arxiv.org/abs/2109.00950>

D. Kasper, J. L. Bean, M.R. Line, A. Seifahrt, J. Sturmer, **L. Pino**, J.-M. Desert, M. Brogi

Confirmation of Iron Emission Lines and Non-detection of Molecules on the Dayside of KELT-9b with MAROON-X

Astrophysical Journal letters, in press

<https://arxiv.org/abs/2108.08389>

Po-Feng Wu, D. Nelson, A. van der Wel, A. Pillepich, **S. Zibetti**, R. Bezanson, F. D'Eugenio, **A. Gallazzi**, C. Pacifici, C. M. S. Straatman, I. Barisic, E. F. Bell, M.V. Maseda, A. Muzzin, D. Sobral, K.E. Whitaker

Towards precise galaxy evolution: a comparison between spectral indices of $z \sim 1$ galaxies in the IllustrisTNG simulation and the LEGA-C survey

Astrophysical Journal

<https://ui.adsabs.harvard.edu/abs/2021arXiv210810455V>

OTHER ARTICLES

S. Bianchi

How the Arcetri Astronomical Observatory became Astrophysical

Il Colle Di Galileo (2021), 10, 2

<https://oajournals.fupress.net/index.php/cdg/article/view/13085>
