

## CDS Team Publications 2015-2016 (October)

### Refereed Journals

#### 2015

Paradis, D., Mény, C., Noriega-Crespo, A., Paladini, R., Bernard, J.-P., Bot, C., Cambrésy, L., Demyk, K., Gromov, V., Rivera-Ingraham, A., and Veneziani, M.

*Modeling and predicting the shape of the far-infrared to submillimeter emission in ultra-compact HII regions and cold clumps.*

Astronomy and Astrophysics, v.572, p.A37-

Traficante, A., Paladini, R., Compiegne, M., Alves, M. I. R., Cambrésy, L., Gibson, S. J., Tibbs, C. T., Noriega-Crespo, A., Molinari, S., Carey, S. J., Ingalls, J. G., Natoli, P., Davies, R. D., Davis, R. J., Dickinson, C., and Fuller, G. A.

*The pros and cons of the inversion method approach to derive 3D dust emission properties in the ISM: the Hi-GAL field centred on  $(l, b) = (30^\circ, 0^\circ)$ .*

Monthly Notices of the Royal Astronomical Society, v.440, p.3588-3612

Camacho, J., Torres, S., Garcia-Berro, E., Zorotovic, M., Schreiber, M. R., Rebassa-Mansergas, A., Neboš Gomez-Moran, A., and Gänsicke, B. T.

*Monte Carlo simulations of post-common-envelope white dwarf + main sequence binaries: comparison with the SDSS DR7 observed sample.*

Astronomy and Astrophysics, v.566, p.A86-

Kenney, J. D. P., Geha, M., Jachym, P., Crowl, H. H., Dague, W., Chung, A., van Gorkom, J., and Vollmer, B.

*Transformation of a Virgo Cluster Dwarf Irregular Galaxy by Ram Pressure Stripping: IC3418 and Its Fireballs.*

The Astrophysical Journal, v.780, p.119-

Merlin, E., Fontana, A., Ferguson, H. C., Dunlop, J. S., Elbaz, D., Bourne, N., Bruce, V. A., Buitrago, F., Castellano, M., Schreiber, C., Grazian, A., McLure, R. J., Okumura, K., Shu, X., Wang, T., Amorin, R., Boutsia, K., Cappelluti, N., Comastri, A., Derriere, S., Faber, S. M., and Santini, P.

*T-PHOT: A new code for PSF-matched, prior-based, multiwavelength extragalactic deconvolution photometry.*

Astronomy and Astrophysics, v.582, p.A15-

Lockhart, K. E., Kewley, L. J., Lu, J. R., Allen, M. G., Rupke, D., Calzetti, D., Davies, R. I., Dopita, M. A., Engel, H., Heckman, T. M., Leitherer, C., and Sanders, D. B.

*HST/WFC3 Observations of an Off-nuclear Superbubble in Arp 220.*

The Astrophysical Journal, v.810, p.149-

Fernique, P., Allen, M. G., Boch, T., Oberto, A., Pineau, F.-X., Durand, D., Bot, C., Cambrésy, L., Derriere, S., Genova, F., and Bonnarel, F.

*Hierarchical progressive surveys. Multi-resolution HEALPix data structures for astronomical images, catalogues, and 3-dimensional data cubes.*

Astronomy and Astrophysics, v.578, p.A114-

Pecker, J.-C., Narlikar, J. V., Ochsenein, F., and Wickramasinghe, C.

*The local contribution to the microwave background radiation.*

Research in Astronomy and Astrophysics, v.15, p.461-

Hony, S., Gouliermis, D. A., Galliano, F., Galametz, M., Cormier, D., Chen, C.-H. R., Dib, S., Hughes, A., Klessen, R. S., Roman-Duval, J., Smith, L., Bernard, J.-P., Bot, C., Carlson, L., Gordon, K., Indebetouw, R., Leboutteiller, V., Lee, M.-Y., Madden, S. C., Meixner, M., Oliveira, J., Rubio, M., Sauvage, M., and Wu, R.

*Star formation rates from young-star counts and the structure of the ISM across the NGC 346/N66 complex in the SMC.*

Monthly Notices of the Royal Astronomical Society, v.448, p.1847-1862

Naslim, N., Kemper, F., Madden, S. C., Hony, S., Chu, Y.-H., Galliano, F., Bot, C., Yang, Y., Seok, J., Oliveira, J. M., van Loon, J. T., Meixner, M., Li, A., Hughes, A., Gordon, K. D., Otsuka, M., Hirashita, H., Morata, O., Leboutteiller, V., Indebetouw, R., Srinivasan, S., Bernard, J.-P., and Reach, W. T.

*Molecular hydrogen emission in the interstellar medium of the Large Magellanic Cloud.*

Monthly Notices of the Royal Astronomical Society, v.446, p.2490-2504

Lakicevic, M., van Loon, J. T., Meixner, M., Gordon, K., Bot, C., Roman-Duval, J., Babler, B., Bolatto, A., Engelbracht, C., Filipovic, M., Hony, S., Indebetouw, R., Misselt, K., Montiel, E., Okumura, K., Panuzzo, P., Patat, F., Sauvage, M., Seale, J., Sonneborn, G., Temim, T., Urosevic, D., and Zanardo, G.

*The Influence of Supernova Remnants on the Interstellar Medium in the Large Magellanic Cloud Seen at 20-600  $\mu\text{m}$*

*Wavelengths.*

The Astrophysical Journal, v.799, p.50-

Moore, T. J. T., Plume, R., Thompson, M. A., Parsons, H., Urquhart, J. S., Eden, D. J., Dempsey, J. T., Morgan, L. K., Thomas, H. S., Buckle, J., Brunt, C. M., Butner, H., Carretero, D., Chrysostomou, A., deVilliers, H. M., Fich, M., Hoare, M. G., Manser, G., Mottram, J. C., Natario, C., Olguin, F., Peretto, N., Polychroni, D., Redman, R. O., Rigby, A. J., Salji, C., Summers, L. J., Berry, D., Currie, M. J., Jenness, T., Pestalozzi, M., Traficante, A., Bastien, P., diFrancesco, J., Davis, C. J., Evans, A., Friberg, P., Fuller, G. A., Gibb, A. G., Gibson, S., Hill, T., Johnstone, D., Joncas, G., Longmore, S. N., Lumsden, S. L., Martin, P. G., Lu'o'ng, Q. N., Pineda, J. E., Purcell, C., Richer, J. S., Schieven, G. H., Shipman, R., Spaans, M., Taylor, A. R., Viti, S., Weferling, B., White, G. J., and Zhu, M.

*The JCMT Plane Survey: early results from the  $l = 30^\circ$  field.*

Monthly Notices of the Royal Astronomical Society, v.453, p.4264-4277

Urquhart, J. S., Figura, C. C., Moore, T. J. T., Csengeri, T., Lumsden, S. L., Pillai, T., Thompson, M. A., Eden, D. J., and Morgan, L. K.

*The RMS survey: ammonia mapping of the environment of massive young stellar objects.*

Monthly Notices of the Royal Astronomical Society, v.452, p.4029-4053

Eden, D. J., Moore, T. J. T., Urquhart, J. S., Elia, D., Plume, R., Rigby, A. J., and Thompson, M. A.

*Star formation scales and efficiency in Galactic spiral arms.*

Monthly Notices of the Royal Astronomical Society, v.452, p.289-300

Urquhart, J. S., Moore, T. J. T., Menten, K. M., König, C., Wyrowski, F., Thompson, M. A., Csengeri, T., Leurini, S., and Eden, D. J.

*The almost ubiquitous association of 6.7-GHz methanol masers with dust.*

Monthly Notices of the Royal Astronomical Society, v.446, p.3461-3477

Genova, F., Allen, M. G., Arviset, C., Lawrence, A., Pasian, F., Solano, E., and Wambsganss, J.

*Euro-VO-Coordination of virtual observatory activities in Europe.*

Astronomy and Computing, v.11, p.181-189

Schaaff, A. and Jagade, S.

*Mobile applications and Virtual Observatory.*

Astronomy and Computing, v.11, p.155-160

Taylor, M. B., Boch, T., and Taylor, J.

*SAMP, the Simple Application Messaging Protocol: Letting applications talk to each other.*

Astronomy and Computing, v.11, p.81-90

Louys, M.

*Data modeling for the virtual observatory.*

Astronomy and Computing, v.11, p.74-80

Aubert, D., Deparis, N., and Ocvirk, P.

*EMMA: an adaptive mesh refinement cosmological simulation code with radiative transfer.*

Monthly Notices of the Royal Astronomical Society, v.454, p.1012-1037

Grand, R. J. J., Bovy, J., Kawata, D., Hunt, J. A. S., Famaey, B., Siebert, A., Monari, G., and Cropper, M.

*Spiral- and bar-driven peculiar velocities in Milky Way-sized galaxy simulations.*

Monthly Notices of the Royal Astronomical Society, v.453, p.1867-1878

Nebot Gomez-Moran, A., Motch, C., Pineau, F.-X., Carrera, F. J., Pakull, M. W., and Riddick, F.

*Infrared identification of hard X-ray sources in the Galaxy.*

Monthly Notices of the Royal Astronomical Society, v.452, p.884-901

Hyde, E. A., Keller, S., Zucker, D. B., Ibata, R., Siebert, A., Lewis, G. F., Penarrubia, J., Irwin, M., Gilmore, G., Lane, R. R., Koch, A., Conn, A. R., Diakogiannis, F. I., and Martell, S.

*Selecting Sagittarius: Identification and Chemical Characterization of the Sagittarius Stream.*

The Astrophysical Journal, v.805, p.189-

Kordopatis, G., Binney, J., Gilmore, G., Wyse, R. F. G., Belokurov, V., McMillan, P. J., Hatfield, P., Grebel, E. K., Steinmetz, M., Navarro, J. F., Seabroke, G., Minchev, I., Chiappini, C., Bienaymé, O., Bland-Hawthorn, J., Freeman, K. C., Gibson, B. K., Helmi, A., Munari, U., Parker, Q., Reid, W. A., Siebert, A., Siviero, A., and Zwitter, T.

*The rich are different: evidence from the RAVE survey for stellar radial migration.*

Monthly Notices of the Royal Astronomical Society, v.447, p.3526-3535

Hawkins, K., Kordopatis, G., Gilmore, G., Masseron, T., Wyse, R. F. G., Ruchti, G., Bienaymé, O., Bland-Hawthorn, J., Boeche, C., Freeman, K., Gibson, B. K., Grebel, E. K., Helmi, A., Kunder, A., Munari, U., Navarro, J. F., Parker, Q. A., Reid, W. A., Scholz, R. D., Seabroke, G., Siebert, A., Steinmetz, M., Watson, F., and Zwitter, T.

*Characterizing the high-velocity stars of RAVE: the discovery of a metal-rich halo star born in the Galactic disc.*

Monthly Notices of the Royal Astronomical Society, v.447, p.2046-2058

Gillet, N., Ocvirk, P., Aubert, D., Knebe, A., Libeskind, N., Yepes, G., Gottlöber, S., and Hoffman, Y.  
*Vast Planes of Satellites in a High-resolution Simulation of the Local Group: Comparison to Andromeda.*  
The Astrophysical Journal, v.800, p.34-

## 2016

Damas-Segovia, A., Beck, R., Vollmer, B., Wiegert, T., Krause, M., Irwin, J., Wezgowiec, M., Li, J., Dettmar, R.-J., English, J., and Wang, Q. D.  
*CHANG-ES. VII. Magnetic Outflows from the Virgo Cluster Galaxy NGC 4388.*  
The Astrophysical Journal, v.824, p.30

Cappelluti, N., Comastri, A., Fontana, A., Zamorani, G., Amorin, R., Castellano, M., Merlin, E., Santini, P., Elbaz, D., Schreiber, C., Shu, X., Wang, T., Dunlop, J. S., Bourne, N., Bruce, V. A., Buitrago, F., Michalowski, M. J., Derriere, S., Ferguson, H. C., Faber, S. M., and Vito, F.  
*Chandra Counterparts of CANDELS GOODS-S Sources.*  
The Astrophysical Journal, v.823, p.95

Castellano, M., Amorin, R., Merlin, E., Fontana, A., McLure, R. J., Marmol-Queralto, E., Mortlock, A., Parsa, S., Dunlop, J. S., Elbaz, D., Balestra, I., Boucaud, A., Bourne, N., Boutsia, K., Brammer, G., Bruce, V. A., Buitrago, F., Capak, P., Cappelluti, N., Ciesla, L., Comastri, A., Cullen, F., Derriere, S., Faber, S. M., Giallongo, E., Grazian, A., Grillo, C., Mercurio, A., Michalowski, M. J., Nonino, M., Paris, D., Pentericci, L., Pilo, S., Rosati, P., Santini, P., Schreiber, C., Shu, X., and Wang, T.  
*The ASTRODEEP Frontier Fields catalogues. II. Photometric redshifts and rest frame properties in Abell-2744 and MACS-J0416.*  
Astronomy and Astrophysics, v.590, p.A31

Merlin, E., Amorin, R., Castellano, M., Fontana, A., Buitrago, F., Dunlop, J. S., Elbaz, D., Boucaud, A., Bourne, N., Boutsia, K., Brammer, G., Bruce, V. A., Capak, P., Cappelluti, N., Ciesla, L., Comastri, A., Cullen, F., Derriere, S., Faber, S. M., Ferguson, H. C., Giallongo, E., Grazian, A., Lotz, J., Michalowski, M. J., Paris, D., Pentericci, L., Pilo, S., Santini, P., Schreiber, C., Shu, X., and Wang, T.  
*The ASTRODEEP Frontier Fields catalogues. I. Multiwavelength photometry of Abell-2744 and MACS-J0416.*  
Astronomy and Astrophysics, v.590, p.A30

Zorotovic, M., Schreiber, M. R., Parsons, S. G., Gänsicke, B. T., Hardy, A., Agurto-Gangas, C., Nebot Gomez-Moran, A., Rebassa-Mansergas, A., and Schwöpe, A. D.  
*Detached cataclysmic variables are crossing the orbital period gap.*  
Monthly Notices of the Royal Astronomical Society, v.457, p.3867-3877

Nehlig, F., Vollmer, B., and Braine, J.  
*Effects of environmental gas compression on the multiphase ISM and star formation . The Virgo spiral galaxies NGC 4501 and NGC 4567/68.*  
Astronomy and Astrophysics, v.587, p.A108

Galametz, M., Hony, S., Albrecht, M., Galliano, F., Cormier, D., Lebouteiller, V., Lee, M. Y., Madden, S. C., Bolatto, A., Bot, C., Hughes, A., Israel, F., Meixner, M., Oliviera, J. M., Paradis, D., Pellegrini, E., Roman-Duval, J., Rubio, M., Sewilo, M., Fukui, Y., Kawamura, A., and Onishi, T.  
*The dust properties and physical conditions of the interstellar medium in the LMC massive star-forming complex N11.*  
Monthly Notices of the Royal Astronomical Society, v.456, p.1767-1790

Shu, X. W., Elbaz, D., Bourne, N., Schreiber, C., Wang, T., Dunlop, J. S., Fontana, A., Leiton, R., Pannella, M., Okumura, K., Michalowski, M. J., Santini, P., Merlin, E., Buitrago, F., Bruce, V. A., Amorin, R., Castellano, M., Derriere, S., Comastri, A., Cappelluti, N., Wang, J. X., and Ferguson, H. C.  
*Identification of  $z \geq 2$  Herschel 500  $\mu\text{m}$  Sources Using Color Deconvolution.*  
The Astrophysical Journal Supplement Series, v.222, p.4

Kiefer, F., Halbwachs, J.-L., Arenou, F., Pourbaix, D., Famaey, B., Guillout, P., Lebreton, Y., Nebot Gomez-Moran, A., Mazeh, T., Salomon, J.-B., Soubiran, C., and Tal-Or, L.  
*Masses of the components of SB2 binaries observed with Gaia - III. Accurate SB2 orbits for 10 binaries and masses of HIP 87895.*  
Monthly Notices of the Royal Astronomical Society, v.458, p.3272-3281

Rosen, S. R., Webb, N. A., Watson, M. G., Ballet, J., Barret, D., Braitto, V., Carrera, F. J., Ceballos, M. T., Coriat, M., Della Ceca, R., Denkinson, G., Esquej, P., Farrell, S. A., Freyberg, M., Grisé, F., Guillout, P., Heil, L., Koliopanos, F., Law-Green, D., Lamer, G., Lin, D., Martino, R., Michel, L., Motch, C., Nebot Gomez-Moran, A., Page, C. G., Page, K., Page, M., Pakull, M. W., Pye, J., Read, A., Rodriguez, P., Sakano, M., Saxton, R., Schwöpe, A., Scott, A. E., Sturm, R., Traulsen, I., Yershov, V., and Zolotukhin, I.  
*The XMM-Newton serendipitous survey. VII. The third XMM-Newton serendipitous source catalogue.*  
Astronomy and Astrophysics, v.590, p.A1

Monari, G., Famaey, B., and Siebert, A.

*Modelling the Galactic disc: perturbed distribution functions in the presence of spiral arms.*

Monthly Notices of the Royal Astronomical Society, v.457, p.2569-2582

Anguiano, B., De Silva, G. M., Freeman, K., Da Costa, G. S., Zwitter, T., Quillen, A. C., Zucker, D. B., Navarro, J. F., Kunder, A., Siebert, A., Wyse, R. F. G., Grebel, E. K., Kordopatis, G., Gibson, B. K., Seabroke, G., Sharma, S., Wojno, J., Bland-Hawthorn, J., Parker, Q. A., Steinmetz, M., Boeche, C., Gilmore, G., Bienaymé, O., Reid, W., and Watson, F.

*Identification of Globular Cluster Stars in RAVE data II: Extended tidal debris around NGC 3201.*

Monthly Notices of the Royal Astronomical Society, v.457, p.2078-2085

Vollmer, B., Nehlig, F., and Ibata, R.

*The flaring Hi disk of the nearby spiral galaxy NGC 2683.*

Astronomy and Astrophysics, v.586, p.A98

Halbwachs, J.-L., Boffin, H. M. J., Le Bouquin, J.-B., Kiefer, F., Famaey, B., Salomon, J.-B., Arenou, F., Pourbaix, D., Anthonioz, F., Grellmann, R., Guieu, S., Sana, H., Guillout, P., Jorissen, A., Lebreton, Y., Mazeh, T., Tal-Or, L., and Gomez-Moran, A. N.

*Masses of the components of SB2s observed with Gaia - II. Masses derived from PIONIER interferometric observations for Gaia validation.*

Monthly Notices of the Royal Astronomical Society, v.455, p.3303-3311