

## CDS Team Publications Nov.2019 – Oct. 2020

### Refereed Journals

Webb, N. A., Coriat, M., Traulsen, I., Ballet, J., Motch, C., Carrera, F. J., Koliopanos, F., Authier, J., de la Calle, I., Ceballos, M. T., Colomo, E., Chuard, D., Freyberg, M., Garcia, T., Kolehmainen, M., Lamer, G., Lin, D., Maggi, P., Michel, L., Page, C. G., Page, M. J., Perea-Calderon, J. V., Pineau, F.-X., Rodriguez, P., Rosen, S. R., Santos Lleo, M., Saxton, R. D., Schwone, A., Tomás, L., Watson, M. G., and Zakardjian, A.

*The XMM-Newton serendipitous survey IX. The fourth XMM-Newton serendipitous source catalogue.*  
Astronomy and Astrophysics, v.641, A136

Steinmetz, M., Guiglion, G., McMillan, P. J., Matijevič, G., Enke, H., Kordopatis, G., Zwitter, T., Valentini, M., Chiappini, C., Casagrande, L., Wojno, J., Anguiano, B., Bienaymé, O., Bijaoui, A., Binney, J., Burton, D., Cass, P., de Laverny, P., Fiegert, K., Freeman, K., Fulbright, J. P., Gibson, B. K., Gilmore, G., Grebel, E. K., Helmi, A., Kunder, A., Munari, U., Navarro, J. F., Parker, Q., Ruchti, G. R., Recio-Blanco, A., Reid, W., Seabroke, G. M., Siviero, A., Siebert, A., Stupar, M., Watson, F., Williams, M. E. K., Wyse, R. F. G., Anders, F., Antoja, T., Birko, D., Bland-Hawthorn, J., Bossini, D., García, R. A., Carrillo, I., Chaplin, W. J., Elsworth, Y., Famaey, B., Gerhard, O., Jofre, P., Just, A., Mathur, S., Miglio, A., Minchev, I., Monari, G., Mosser, B., Ritter, A., Rodrigues, T. S., Scholz, R.-D., Sharma, S., Sysoliatina, K., and RAVE Collaboration

*The Sixth Data Release of the Radial Velocity Experiment (RAVE). II. Stellar Atmospheric Parameters, Chemical Abundances, and Distances.*

The Astronomical Journal, v.160, A83

Steinmetz, M., Matijevič, G., Enke, H., Zwitter, T., Guiglion, G., McMillan, P. J., Kordopatis, G., Valentini, M., Chiappini, C., Casagrande, L., Wojno, J., Anguiano, B., Bienaymé, O., Bijaoui, A., Binney, J., Burton, D., Cass, P., de Laverny, P., Fiegert, K., Freeman, K., Fulbright, J. P., Gibson, B. K., Gilmore, G., Grebel, E. K., Helmi, A., Kunder, A., Munari, U., Navarro, J. F., Parker, Q., Ruchti, G. R., Recio-Blanco, A., Reid, W., Seabroke, G. M., Siviero, A., Siebert, A., Stupar, M., Watson, F., Williams, M. E. K., Wyse, R. F. G., Anders, F., Antoja, T., Birko, D., Bland-Hawthorn, J., Bossini, D., García, R. A., Carrillo, I., Chaplin, W. J., Elsworth, Y., Famaey, B., Gerhard, O., Jofre, P., Just, A., Mathur, S., Miglio, A., Minchev, I., Monari, G., Mosser, B., Ritter, A., Rodrigues, T. S., Scholz, R.-D., Sharma, S., Sysoliatina, K., and RAVE Collaboration

*The Sixth Data Release of the Radial Velocity Experiment (RAVE). I. Survey Description, Spectra, and Radial Velocities.*

The Astronomical Journal, v.160, A82

H Hilmi, T., Minchev, I., Buck, T., Martig, M., Quillen, A. C., Monari, G., Famaey, B., de Jong, R. S., Laporte, C. F. P., Read, J., Sanders, J. L., Steinmetz, M., and Wegg, C.

*Fluctuations in galactic bar parameters due to bar-spiral interaction.*

Monthly Notices of the Royal Astronomical Society, v.497, p.955

Krause, M., Irwin, J., Schmidt, P., **Stein, Y.**, Miskolczi, A., Carolina Mora-Partiarroyo, S., Wiegert, T., Beck, R., Stil, J. M., Heald, G., Li, J.-T., Damas-Segovia, A., Vargas, C. J., Rand, R. J., West, J., Walterbos, R. A. M., Dettmar, R.-J., English, J., and Woodfinden, A.

*CHANG-ES. XXII. Coherent magnetic fields in the halos of spiral galaxies.*

Astronomy and Astrophysics, v.639, A112

**Stein, Y.**, Dettmar, R.-J., Beck, R., Irwin, J., Wiegert, T., Miskolczi, A., Wang, Q. D., English, J., Henriksen, R., Radica, M., and Li, J.-T.

*CHANG-ES. XXI. Transport processes and the X-shaped magnetic field of NGC 4217: off-center superbubble structure.*

Astronomy and Astrophysics, v.639, A111

Lewis, J. S. W., **Ocvirk, P.**, Aubert, D., **Sorce, J. G.**, Shapiro, P. R., Deparis, N., Dawoodbhoy, T., Teyssier, R., Yepes, G., Gottlöber, S., Ahn, K., Iliev, I. T., and Chardin, J.

*Galactic ionizing photon budget during the epoch of reionization in the Cosmic Dawn II simulation.*

Monthly Notices of the Royal Astronomical Society, v.496, p.4357

**Ocvirk, P.**, Aubert, D., **Sorce, J. G.**, Shapiro, P. R., Deparis, N., Dawoodbhoy, T., Lewis, J., Teyssier, R., Yepes, G., Gottlöber, S., Ahn, K., Iliev, I. T., and Hoffman, Y.

*Cosmic Dawn II (CoDa II): a new radiation-hydrodynamics simulation of the self-consistent coupling of galaxy formation and reionization.*

Monthly Notices of the Royal Astronomical Society, v.496, p.4107

Klutsch, A., Frasca, A., Guillout, P., Montes, D., **Pineau, F.-X.**, Grosso, N., and Stelzer, B.

*Discovery of new members of the nearby young stellar association in Cepheus.*

Astronomy and Astrophysics, v.637, A43

Schisano, E., Molinari, S., Elia, D., Benedettini, M., Olmi, L., Pezzuto, S., Traficante, A., Brescia, M., Cavuoti, S., di Giorgio, A. M., Liu, S. J., Moore, T. J. T., Noriega-Crespo, A., Riccio, G., Baldeschi, A., Becciani, U., Peretto, N., Merello, M., Vitello, F., Zavagno, A., Beltrán, M. T., **Cambrésy, L.**, Eden, D. J., Li Causi, G., Molinaro, M., Palmeirim, P., Sciacca, E., Testi, L., Umana, G., and Whitworth, A. P.

*The Hi-GAL catalogue of dusty filamentary structures in the Galactic plane.*

Monthly Notices of the Royal Astronomical Society, v.492, p.5456

Ibata, R., Bellazzini, M., Thomas, G., Malhan, K., Martin, N., Famaey, B., and **Siebert, A.**

*A Panoramic Landscape of the Sagittarius Stream in Gaia DR2 Revealed with the STREAMFINDER Spyglass.*

The Astrophysical Journal, v.891, L19

Ibata, R., Thomas, G., Famaey, B., Malhan, K., Martin, N., and **Monari, G.**

*Detection of Strong Epicyclic Density Spikes in the GD-1 Stellar Stream: An Absence of Evidence for the Influence of Dark Matter Subhalos?.*

The Astrophysical Journal, v.891, L16

**Lutz, K. A.**, Kilborn, V., Catinella, B., Cortese, L., Brown, T. H., and Koribalski, B.

*The H IX galaxy survey. III. The gas-phase metallicity in H I eXtreme galaxies.*

Astronomy and Astrophysics, v.635, A69

**Vollmer, B.**, Soida, M., Beck, R., and Powalka, M.

*Deciphering the radio star formation correlation on kpc scales. I. Adaptive kernel smoothing experiments.*

Astronomy and Astrophysics, v.633, A144

**Monari, G.**, Famaey, B., **Siebert, A.**, Bienaymé, O., Ibata, R., Wegg, C., and Gerhard, O.

*Tracing Hercules in Galactic azimuth with Gaia DR2.*

Astronomy and Astrophysics, v.632, A107

**Stein, Y.**, Dettmar, R.-J., Weżgowiec, M., Irwin, J., Beck, R., Wiegert, T., Krause, M., Li, J.-T., Heesen, V., Miskolczi, A., MacDonald, S., and English, J.

*CHANG-ES. XIX. Galaxy NGC 4013: a diffusion-dominated radio halo with plane-parallel disk and vertical halo magnetic fields.*

Astronomy and Astrophysics, v.632, A13

Mora-Partiarroyo, S. C., Krause, M., Basu, A., Beck, R., Wiegert, T., Irwin, J., Henriksen, R., **Stein, Y.**, Vargas, C. J., Heesen, V., Walterbos, R. A. M., Rand, R. J., Heald, G., Li, J., Kamieneski, P., and English, J.

*CHANG-ES. XV. Large-scale magnetic field reversals in the radio halo of NGC 4631.*

Astronomy and Astrophysics, v.632, A11

Mora-Partiarroyo, S. C., Krause, M., Basu, A., Beck, R., Wiegert, T., Irwin, J., Henriksen, R., **Stein, Y.**, Vargas, C. J., Heesen, V., Walterbos, R. A. M., Rand, R. J., Heald, G., Li, J., Kamieneski, P., and English, J.

*CHANG-ES. XIV. Cosmic-ray propagation and magnetic field strengths in the radio halo of NGC 4631.*

Astronomy and Astrophysics, v.632, A10

Chardin, J., Uhlrich, G., Aubert, D., Deparis, N., Gillet, N., **Ocvirk, P.**, and Lewis, J.

*A deep learning model to emulate simulations of cosmic reionization.*

Monthly Notices of the Royal Astronomical Society, v.490, p.1065