

# Onsala Space Observatory, Chalmers Publication list 2013

Compiled by Magnus Thomasson

Publications in refereed journals 2013 enabled by the Onsala infrastructure are recorded below.

[Astronomy: Onsala 20 m telescope \(single-dish\)](#)

[Astronomy: APEX](#)

[Astronomy: ALMA](#)

[Astronomy: VLBI](#)

[Astronomy: LOFAR](#)

[Geoscience](#)

## Astronomy: Onsala 20 m telescope (single-dish)

*On the ubiquity of molecular anions in the dense interstellar medium.*

M. A. Cordiner, J. V. Buckle, E. S. Wirström, A. O. H. Olofsson, and S. B. Charnley.  
The Astrophysical Journal, 770:48 (2013)

*Mass and motion of globulettes in the Rosette Nebula.*

G. F. Gahm, C. M. Persson, M. M. Mäkelä, and L. K. Haikala.  
Astron. Astrophys. 555, A57 (2013)

*Class I methanol masers in low-mass star-forming regions.*

S. V. Kalenskii, S. Kurtz, P. Bergman.  
Astronomy Reports 57, 120 (2013)

*Molecular-line and continuum study of the W40 cloud.*

L. Pirogov, D. K. Ojha, M. Thomasson, Y-F. Wu and I. Zinchenko.  
Mon. Not. R. Astron. Soc. 436, 3186 (2013)

*The abundance of HCN in circumstellar envelopes of AGB stars of different chemical type.*

F. L. Schöier, S. Ramstedt, H. Olofsson, M. Lindqvist, J. H. Bieging, and K. B. Marvel.  
Astron. Astrophys. 550, A78 (2013)

*Dense cores in the dark cloud complex LDN1188.*

E. Verebélyi, V. Könyves, S. Nikolic, Cs. Kiss, A. Moór1, P. Ábrahám1, and M. Kun.  
Astron. Nachr. AN 334, No. 9, 920 (2013)

## Astronomy: APEX

Publications from all APEX partner's observing time.

*The thermal state of molecular clouds in the Galactic center: evidence for non-photon-driven heating.*

Y. Ao, C. Henkel, K. M. Menten, M. A. Requena-Torres, T. Stanke, R. Mauersberger, S. Aalto, S. Mühle, and J. Mangum.  
Astron. Astrophys. 550, A135 (2013)

*Dimethyl ether in its ground state,  $v = 0$ , and lowest two torsionally excited states,  $v11 = 1$  and  $v15 = 1$ , in the high-mass star-forming region G327.3-0.6.*

Bisschop, S. E., Schilke, P., Wyrowski, F., Belloche, A., Brinch, C., Endres, C. P., Güsten, R., Hafok, H., Heyminck, S., Jørgensen, J. K., Müller, H. S. P., Menten, K. M., Rolffs, R., Schlemmer, S.

A&A 552, 122 (2013)

*An extended Herschel drop-out source in the center of AS1063: a normal dusty galaxy at  $z = 6.1$  or SZ substructures?*

F. Boone, B. Clément, J. Richard, D. Schaerer, D. Lutz, A. Weiß, M. Zemcov, E. Egami, T. D. Rawle, G. L. Walth, J.-P. Kneib, F. Combes, I. Smail, A. M. Swinbank, B. Altieri, A. W. Blain, S. Chapman, M. Dessauges-Zavadsky, R. J. Ivison, K. K. Knudsen, A. Omont, R. Pelló, P. G. Pérez-González, I. Valtchanov, P. van der Werf, and M. Zamojski.

Astron. Astrophys. 559, L1 (2013)

*SPT 0538-50: Physical Conditions in the Interstellar Medium of a Strongly Lensed Dusty Star-forming Galaxy at  $z = 2.8$ .*

Bothwell, M. S., Aguirre, J. E., Chapman, S. C., Marrone, D. P., Vieira, J. D., Ashby, M. L. N., Aravena, M., Benson, B. A., Bock, J. J., Bradford, C. M., Brodwin, M., Carlstrom, J. E., Crawford, T. M., de Breuck, C., Downes, T. P., Fassnacht, C. D., Gonzalez, A. H., Greve, T. R., Gullberg, B., Hezaveh, Y., Holder, G. P., Holzapfel, W. L., Ibar, E., Ivison, R., Kamenetzky, J., Keisler, R., Lupu, R. E., Ma, J., Malkan, M., McIntyre, V., Murphy, E. J., Nguyen, H. T., Reichardt, C. L., Rosenman, M., Spilker, J. S., Stalder, B., Stark, A. A., Strandet, M., Vernet, J., Weiß, A., Welikala, N.

ApJ 779, 67 (2013)

*Extended rotating disks around post-AGB stars.*

Bujarrabal, V., Alcolea, J., Van Winckel, H., Santander-García, M., Castro-Carrizo, A.  
A&A 557 A104 (2013)

*Large scale IRAM 30 m CO-observations in the giant molecular cloud complex W43.*

Carlhoff, P., Nguyen Luong, Q., Schilke, P., Motte, F., Schneider, N., Beuther, H., Bontemps, S., Heitsch, F., Hill, T., Kramer, C., Ossenkopf, V., Schuller, F., Simon, R., Wyrowski, F.  
A&A 560 A24 (2013)

*CO(6-5) and [C i](2-1) pointed observations of five protoplanetary disks: Warm gas in HD 142527.*

Casassus, S., Hales, A., de Gregorio, I., Dent, B., Belloche, A., Güsten, R., Ménard, F., Hughes, A. M., Wilner, D., Salinas, V.  
A&A 553 A64 (2013)

*Characterization of infrared dark clouds. NH<sub>3</sub> observations of an absorption-contrast selected IRDC sample.*

Chira, R.-A., Beuther, H., Linz, H., Schuller, F., Walmsley, C. M., Menten, K. M., Bronfman, L.

A&A 552 A40 (2013)

*Sparse Aperture Masking Observations of the FL Cha Pre-transitional Disk.*

Cieza, Lucas A., Lacour, Sylvestre, Schreiber, Matthias R., Casassus, Simon, Jordán, Andrés, Mathews, Geoffrey S., Cánovas, Héctor, Ménard, François, Kraus, Adam L., Pérez, Sebastián, Tuthill, Peter, Ireland, Michael J.

ApJ 762 L12 (2013)

*ATLASGAL - compact source catalogue: 330° < ℓ < 21°.*

Contreras, Y., Schuller, F., Urquhart, J. S., Csengeri, T., Wyrowski, F., Beuther, H., Bontemps, S., Bronfman, L., Henning, T., Menten, K. M., Schilke, P., Walmsley, C. M., Wienen, M., Tackenberg, J., Linz, H.

A&A 549 A45 (2013)

*Structure and radial equilibrium of filamentary molecular clouds.*

Contreras, Y., Rathborne, J., Garay, G.

MNRAS 433 251-258 (2013)

*Heavy water stratification in a low-mass protostar.*

Coutens, A., Vastel, C., Cazaux, S., Bottinelli, S., Caux, E., Ceccarelli, C., Demyk, K., Taquet, V., Wakelam, V.

A&A 553 A75 (2013)

*Deuterated water in the solar-type protostars NGC 1333 IRAS 4A and IRAS 4B.*

Coutens, A., Vastel, C., Cabrit, S., Codella, C., Kristensen, L. E., Ceccarelli, C., van Dishoeck, E. F., Boogert, A. C. A., Bottinelli, S., Castets, A., Caux, E., Comito, C., Demyk, K., Herpin, F., Lefloch, B., McCoey, C., Mottram, J. C., Parise, B., Taquet, V., van der Tak, F. F. S., Visser, R., Yıldız, U. A.

A&A 560 A39 (2013)

*The detection of FIR emission from high-redshift star-forming galaxies in the ECDF-S.*

Davies, L. J. M., Bremer, M. N., Stanway, E. R., Lehnert, M. D.

MNRAS 433 2588-2603 (2013)

*Carbon monoxide in clouds at low metallicity in the dwarf irregular galaxy WLM.*

Elmegreen, Bruce G., Rubio, Monica, Hunter, Deidre A., Verdugo, Celia, Brinks, Elias, Schruba, Andreas

Nature 495 487-489 (2013)

*Mass and motion of globulettes in the Rosette Nebula.*

G. F. Gahm, C. M. Persson, M. M. Mäkelä, and L. K. Haikala.

Astron. Astrophys. 555, A57 (2013)

*The thermal dust emission in N158-N159-N160 (LMC) star-forming complex mapped by Spitzer, Herschel and LABOCA.*

Galametz, M., Hony, S., Galliano, F., Madden, S. C., Albrecht, M., Bot, C., Cormier, D., Engelbracht, C., Fukui, Y., Israel, F. P., Kawamura, A., Lebouteiller, V., Li, A., Meixner, M., Misselt, K., Montiel, E., Okumura, K., Panuzzo, P., Roman-Duval, J., Rubio, M., Sauvage, M., Seale, J. P., Sewiło, M., van Loon, J. Th.

MNRAS 431 1596-1617 (2013)

*Warm gas in protostellar outflows. I. Flows from the low-mass protostars in L1448 and HH211.*

Gomez-Ruiz, A. I., Wyrowski, F., Gusdorf, A., Leurini, S., Menten, K. M., Güsten, R. A&A 555, 8 (2013)

*The unusual afterglow of the gamma-ray burst 100621A.*

Greiner, J., Krühler, T., Nardini, M., Filgas, R., Moin, A., de Breuck, C., Montenegro-Montes, F., Lundgren, A., Klose, S., fonso, P. M. J., Bertoldi, F., Elliott, J., Kann, D. A., Knust, F., Menten, K., Nicuesa Guelbenzu, A., Olivares E., F., Rau, A., Rossi, A., Schady, P., Schmidl, S., Siringo, G., Spezzi, L., Sudilovsky, V., Tingay, S. J., Updike, A. C., Wang, Z., Weiss, A., Wieringa, M., Wyrowski, F.

A&A 560 A70 (2013)

*Cores, filaments, and bundles: hierarchical core formation in the L1495/B213 Taurus region.*

Hacar, A., Tafalla, M., Kauffmann, J., Kovács, A.

A&A 554 A55 (2013)

*Sub-millimetre source identifications and the microjansky source population at 8.4 GHz in the William Herschel Deep Field.*

Heywood, I., Bielby, R. M., Hill, M. D., Metcalfe, N., Rawlings, S., Shanks, T., Smirnov, O. M.

MNRAS 428 935-951 (2013)

*Non-Zeeman circular polarization of CO rotational lines in SNR IC 443.*

Hezareh, Talayeh, Wiesemeyer, Helmut, Houde, Martin, Gusdorf, Antoine, Siringo, Giorgio A&A 558 A45 (2013)

*ALMA Observations of SPT-discovered, Strongly Lensed, Dusty, Star-forming Galaxies.*

Hezaveh, Y. D., Marrone, D. P., Fassnacht, C. D., Spilker, J. S., Vieira, J. D., Aguirre, J. E., Aird, K. A., Aravena, M., Ashby, M. L. N., Bayliss, M., Benson, B. A., Bleem, L. E., Bothwell, M., Brodwin, M., Carlstrom, J. E., Chang, C. L., Chapman, S. C., Crawford, T. M., Crites, A. T., De Breuck, C., de Haan, T., Dobbs, M. A., Fomalont, E. B., George, E. M., Gladders, M. D., Gonzalez, A. H., Greve, T. R., Halverson, N. W., High, F. W., Holder, G. P., Holzapfel, W. L., Hoover, S., Hrubes, J. D., Husband, K., Hunter, T. R., Keisler, R., Lee, A. T., Leitch, E. M., Lueker, M., Luong-Van, D., Malkan, M., McIntyre, V., McMahon, J. J., Mehl, J., Menten, K. M., Meyer, S. S., Mocanu, L. M., Murphy, E. J., Natoli, T., Padin, S., Plagge, T., Reichardt, C. L., Rest, A., Ruel, J., Ruhl, J. E., Sharon, K., Schaffer, K. K., Shaw, L., Shirokoff, E., Stalder, B., Staniszewski, Z., Stark, A. A., Story, K., Vanderlinde, K., Weiß, A., Welikala, N., Williamson, R.

ApJ 767, 132 (2013)

*An ALMA survey of submillimeter galaxies in the extended Chandra Deep Field South: Source catalogs and multiplicity.*

J. A. Hodge, A. Karim, I. Smail, A. M. Swinbank, F. Walter, A. D. Biggs, R. J. Ivison, A. Weiss, D. M. Alexander, F. Bertoldi, W. N. Brandt, S. C. Chapman, K. E. K. Coppin, P. Cox, A. L. R. Danielson, H. Dannerbauer, C. De Breuck, R. Decarli, A. C. Edge, T. R. Greve, K. K. Knudsen, K. M. Menten, H.-W. Rix, E. Schinnerer, J. M. Simpson, J. L. Wardlow, and P. van der Werf.

The Astrophysical Journal, 768:91 (2013)

*Trigonometric parallaxes of massive star forming regions: G012.88+0.48 and W33.*

Immer, K., Reid, M. J., Menten, K. M., Brunthaler, A., Dame, T. M.

A&A 553 A117 (2013)

*ALMA Resolves 30 Doradus: Sub-parsec Molecular Cloud Structure near the Closest Super Star Cluster.*

Indebetouw, Rémy, Brogan, Crystal, Chen, C.-H. Rosie, Leroy, Adam, Johnson, Kelsey, Muller, Erik, Madden, Suzanne, Cormier, Diane, Galliano, Frédéric, Hughes, Annie, Hunter, Todd, Kawamura, Akiko, Kepley, Amanda, Lebouteiller, Vianney, Meixner, Margaret, Oliveira, Joana M., Onishi, Toshikazu, Vasyunina, Tatiana

ApJ 774, 73 (2013)

*OH/IR stars and their superwinds as observed by the Herschel Space Observatory.*

K. Justtanont, D. Teyssier, M. J. Barlow, M. Matsuura, B. Swinyard, L. B. F. M. Waters, and J. Yates.

Astron. Astrophys. 556, A101 (2013)

*High-fidelity view of the structure and fragmentation of the high-mass, filamentary IRDC G11.11-0.12.*

Kainulainen, J., Ragan, S. E., Henning, T., Stutz, A.

A&A 557 A120 (2013)

*Carbon monoxide in the cold debris of Supernova 1987A.*

J. Kamenetzky, R. McCray, R. Indebetouw, M. J. Barlow, M. Matsuura, M. Baes, J. A. D. L. Blommaert, A. Bolatto, L. Decin, L. Dunne, C. Fransson, J. Glenn, H. L. Gomez, M. A. T. Groenewegen, R. Hopwood, R. P. Kirshner, M. Lakicevic, J. Marcaide, I. Marti-Vidal, M. Meixner, P. Royer, A. Soderberg, G. Sonneborn, L. Staveley-Smith,

B. M. Swinyard, G. Van de Steene, P. A. M. van Hoof.

The Astrophysical Journal Letters, 773:L34 (2013)

*An Interferometric Spectral Line and Imaging Survey of VY Canis Majoris in the 345 GHz Band.*

Kamiński, T., Gottlieb, C. A., Young, K. H., Menten, K. M., Patel, N. A.

ApJS 209, 38 (2013)

*An ALMA survey of submillimetre galaxies in the Extended Chandra Deep Field South: high-resolution 870  $\mu$ m source counts.*

A. Karim, A. M. Swinbank, J. A. Hodge, I. R. Smail, F. Walter, A. D. Biggs, J. M. Simpson, A. L. R. Danielson, D. M. Alexander, F. Bertoldi, C. de Breuck, S. C. Chapman, K. E. K. Coppin, H. Dannerbauer, A. C. Edge, T. R. Greve, R. J. Ivison, K. K. Knudsen, K. M. Menten, E. Schinnerer, J. L. Wardlow, A. Weiß and P. van der Werf.

Mon. Not. R. Astron. Soc. 432, 2 (2013)

*Early-stage Massive Star Formation near the Galactic Center: Sgr C.*

Kendrew, S., Ginsburg, A., Johnston, K., Beuther, H., Bally, J., Cyganowski, C. J., Battersby, C.

ApJ 775 L50 (2013)

*The distribution of warm gas in the G327.3-0.6 massive star-forming region.*

Leurini, S., Wyrowski, F., Herpin, F., van der Tak, F., Güsten, R., van Dishoeck, E. F. A&A 550, 10 (2013)

*Evidence of a SiO collimated outflow from a massive YSO in IRAS 17233-3606.*

Leurini, S., Codella, C., Gusdorf, A., Zapata, L., Gómez-Ruiz, A., Testi, L., Pillai, T. A&A 554, A35 (2013)

*Water deuterium fractionation in the high-mass hot core G34.26+0.15.*

Liu, F.-C., Parise, B., Wyrowski, F., Zhang, Q., Güsten, R. A&A 550, 37 (2013)

*$\alpha$  Centauri A in the far infrared. First measurement of the temperature minimum of a star other than the Sun.*

R. Liseau, B. Montesinos, G. Olofsson, G. Bryden, J. P. Marshall, D. Ardila, A. Bayo Aran, W. C. Danchi, C. del Burgo, C. Eiroa, S. Ertel, M. C. W. Fridlund, A. V. Krivov, G. L. Pilbratt, A. Roberge, P. Thébault, J. Wiegert, and G. J. White.

Astron. Astrophys. 549, L7 (2013)

*Herschel/PACS Spectroscopic Survey of Protostars in Orion: The Origin of Far-infrared CO Emission.*

Manoj, P., Watson, D. M., Neufeld, D. A., Megeath, S. T., Vavrek, R., Yu, Vincent, Visser, R., Bergin, E. A., Fischer, W. J., Tobin, J. J., Stutz, A. M., Ali, B., Wilson, T. L., Di Francesco, J., Osorio, M., Maret, S., Poteet, C. A.

ApJ 763, 83 (2013)

*Herschel observations of the debris disc around HIP 92043?*

J. P. Marshall, A. V. Krivov, C. del Burgo, C. Eiroa, A. Mora, B. Montesinos, S. Ertel, G. Bryden, R. Liseau, J.-C. Augereau, A. Bayo, W. Danchi, T. Löhne, J. Maldonado, G. L. Pilbratt, K. Stapelfeldt, P. Thebault, G. J. White, and S. Wolf.

Astron. Astrophys. 557, A58 (2013)

*Physical Characteristics of G331.5-0.1: The Luminous Central Region of a Giant Molecular Cloud.*

Merello, Manuel, Bronfman, Leonardo, Garay, Guido, Nyman, Lars-Åke, Evans, Neal J., II, Walmsley, C. Malcolm

ApJ 774, 38 (2013)

*SABOCA 350- $\mu$ m and LABOCA 870- $\mu$ m dust continuum imaging of IRAS 05399-0121: mapping the dust properties of a pre- and protostellar core system.*

Miettinen, O., Offner, S. S. R.

A&A 553, 88 (2013)

*Dynamics, CO depletion, and deuterium fractionation of the dense condensations within the fragmented prestellar core Orion B9-SMM 6.*

Miettinen, O., Offner, S. S. R.

A&A 555, 41 (2013)

*The Excitation of HCN and HCO+ in the Galactic Center Circumnuclear Disk.*

Mills, E. A. C., Güsten, R., Requena-Torres, M. A., Morris, M. R.

ApJ 779, 47 (2013)

*Ionisation impact of high-mass stars on interstellar filaments. A Herschel study of the RCW 36 bipolar nebula in Vela C.*

Minier, V., Tremblin, P., Hill, T., Motte, F., André, Ph., Lo, N., Schneider, N., Audit, E., White, G. J., Hennemann, M., Cunningham, M., Deharveng, L., Didelon, P., Di Francesco, J., Elia, D., Giannini, T., Nguyen Luong, Q., Pezzuto, S., Rygl, K. L. J., Spinoglio, L., Ward-Thompson, D., Zavagno, A.

A&A 550, 50 (2013)

*A Resolved Debris Disk around the Candidate Planet-hosting Star HD 95086.*

Moór, A., Ábrahám, P., Kóspál, Á., Szabó, Gy. M., Apai, D., Balog, Z., Csengeri, T., Grady, C., Henning, Th., Juhász, A., Kiss, Cs., Pascucci, I., Szulágyi, J., Vavrek, R.

ApJ 775 L51 (2013)

*Stellar clusters in the inner Galaxy and their correlation with cold dust emission.*

Morales, Esteban F. E., Wyrowski, Friedrich, Schuller, Frederic, Menten, Karl M.

A&A 560 A76 (2013)

*Tracing the extreme interplay between radio jets and the ISM in IC 5063.*

Morganti, R., Frieswijk, W., Oonk, R. J. B., Oosterloo, T., Tadhunter, C.

A&A 552 L4 (2013)

*A study on subarcsecond scales of the ammonia and continuum emission toward the G16.59-0.05 high-mass star-forming region.*

Moscadelli, L., Cesaroni, R., Sánchez-Monge, Á., Goddi, C., Furuya, R. S., Sanna, A., Pestalozzi, M.

A&A 558 A145 (2013)

*Exploring Io's atmospheric composition with APEX: First measurement of  $^{34}\text{SO}_2$  and tentative detection of KCl.*

A. Moullet, E. Lellouch, R. Moreno, M. Gurwell, J. H Black, and B. Butler.

The Astrophysical Journal, 776:32 (2013)

*The Mysterious Sickle Object in the Carina Nebula: A Stellar Wind Induced Bow Shock Grazing a Clump?*

Ngoumou, Judith, Preibisch, Thomas, Ratzka, Thorsten, Burkert, Andreas

ApJ 769, 139 (2013)

*The clump mass function of the dense clouds in the Carina nebula complex.*

Pekruhl, S., Preibisch, T., Schuller, F., Menten, K.

A&A 550, 29 (2013)

*Silicon isotopic abundance toward evolved stars and its application for presolar grains.*

T.-C. Peng, E. M. L. Humphreys, L. Testi, A. Baudry, M. Wittkowski, M. G. Rawlings, I. de Gregorio-Monsalvo, W. Vlemmings, L.-A. Nyman, M. D. Gray, and C. de Breuck. Astron. Astrophys. 559, L8 (2013)

*Spokes cluster: The search for the quiescent gas.*

Pineda, J. E., Teixeira, P. S.

A&A 555 A106 (2013)

*G048.66-0.29: Physical State of an Isolated Site of Massive Star Formation.*

Pitann, J., Linz, H., Ragan, S., Stutz, A. M., Beuther, H., Henning, Th., Krause, O., Launhardt, R., Schmiedeke, A., Schuller, F., Tackenberg, J., Vasyunina, T.

ApJ 766, 68 (2013)

*APEX/SABOCA observations of small-scale structure of infrared-dark clouds . I. Early evolutionary stages of star-forming cores.*

Ragan, Sarah E., Henning, Thomas, Beuther, Henrik

A&A 559, 79 (2013)

*Herschel far-infrared observations of the Carina Nebula complex. III. Detailed cloud structure and feedback effects.*

Roccatagliata, V., Preibisch, T., Ratzka, T., Gaczkowski, B.

A&A 554 A6 (2013)

*Initial phases of massive star formation in high infrared extinction clouds. II. Infall and onset of star formation.*

Rygl, K. L. J., Wyrowski, F., Schuller, F., Menten, K. M.

A&A 549 A5 (2013)

*Herschel-HIFI observations of high- $J$  CO and isotopologues in star-forming regions: from low to high mass.*

San José-García, I., Mottram, J. C., Kristensen, L. E., van Dishoeck, E. F., Yıldız, U. A., van der Tak, F. F. S., Herpin, F., Visser, R., McCaughan, C., Wyrowski, F., Braine, J., Johnstone, D. A&A 553, 125 (2013)

*The abundance of HCN in circumstellar envelopes of AGB stars of different chemical type.*

F. L. Schöier, S. Ramstedt, H. Olofsson, M. Lindqvist, J. H. Bieging, and K. B. Marvel.

Astron. Astrophys. 550, A78 (2013)

*Protostars, multiplicity, and disk evolution in the Corona Australis region: a Herschel Gould Belt Study.*

Sicilia-Aguilar, A., Henning, T., Linz, H., André, P., Stutz, A., Eiroa, C., White, G. J.

A&A 551 A34 (2013)

*A Herschel and APEX Census of the Reddest Sources in Orion: Searching for the Youngest Protostars.*

Stutz, Amelia M., Tobin, John J., Stanke, Thomas, Megeath, S. Thomas, Fischer, William J., Robitaille, Thomas, Henning, Thomas, Ali, Babar, di Francesco, James, Furlan, Elise, Hartmann, Lee, Osorio, Mayra, Wilson, Thomas L., Allen, Lori, Krause, Oliver, Manoj, P. ApJ 767, 36 (2013)

*Cold dust in the giant barred galaxy NGC 1365.*

Tabatabaei, F. S., Weiß, A., Combes, F., Henkel, C., Menten, K. M., Beck, R., Kovács, A., Güsten, R. A&A 555 A128 (2013)

*Triggered/sequential star formation? A multi-phase ISM study around the prominent IRDC G18.93-0.03.*

Tackenberg, J., Beuther, H., Plume, R., Henning, T., Stil, J., Walmsley, M., Schuller, F., Schmiedeke, A. A&A 550 A116 (2013)

*The dynamical state of the first hydrostatic core candidate Chamaeleon-MMSI.*

Tsitali, A. E., Belloche, A., Commerçon, B., Menten, K. M. A&A 557, 98 (2013)

*ATLASGAL - environments of 6.7 GHz methanol masers.*

Urquhart, J. S., Moore, T. J. T., Schuller, F., Wyrowski, F., Menten, K. M., Thompson, M. A., Csengeri, T., Walmsley, C. M., Bronfman, L., König, C. MNRAS 431 1752-1776 (2013)

*ATLASGAL - properties of compact H II regions and their natal clumps.*

Urquhart, J. S., Thompson, M. A., Moore, T. J. T., Purcell, C. R., Hoare, M. G., Schuller, F., Wyrowski, F., Csengeri, T., Menten, K. M., Lumsden, S. L., Kurtz, S., Walmsley, C. M., Bronfman, L., Morgan, L. K., Eden, D. J., Russeil, D. MNRAS 435 400-428 (2013)

*Broad-band monitoring tracing the evolution of the jet and disc in the black hole candidate X-ray binary MAXI J1659-152.*

van der Horst, A. J., Curran, P. A., Miller-Jones, J. C. A., Linford, J. D., Gorosabel, J., Russell, D. M., de Ugarte Postigo, A., Lundgren, A. A., Taylor, G. B., Maitra, D., Guziy, S., Belloni, T. M., Kouveliotou, C., Jonker, P. G., Kamble, A., Paragi, Z., Homan, J., Kuulkers, E., Granot, J., Altamirano, D., Buxton, M. M., Castro-Tirado, A., Fender, R. P., Garrett, M. A., Gehrels, N., Hartmann, D. H., Kennea, J. A., Krimm, H. A., Mangano, V., Ramirez-Ruiz, E., Romano, P., Wijers, R. A. M. J., Wijnands, R., Yang, Y. J. MNRAS 436 2625-2638 (2013)

*Outflow forces of low-mass embedded objects in Ophiuchus: a quantitative comparison of analysis methods.*

van der Marel, N., Kristensen, L. E., Visser, R., Mottram, J. C., Yıldız, U. A., van Dishoeck, E. F. A&A 556 A76 (2013)

*Water in star-forming regions with Herschel (WISH) IV. A survey of low-J H<sub>2</sub>O line profiles toward high-mass protostars.*

F. F. S. van der Tak, L. Chavarría, F. Herpin, F. Wyrowski, C.M. Walmsley, E. F. van Dishoeck, A. O. Benz, E. A. Bergin, P. Caselli, M. R. Hogerheijde, D. Johnstone, L. E. Kristensen, R. Liseau, B. Nisini, and M. Tafalla.

Astron. Astrophys. 554, A83 (2013)

*Dusty starburst galaxies in the early Universe as revealed by gravitational lensing.*

Vieira, J. D., Marrone, D. P., Chapman, S. C., De Breuck, C., Hezaveh, Y. D., Weiß, A., Aguirre, J. E., Aird, K. A., Aravena, M., Ashby, M. L. N., Bayliss, M., Benson, B. A., Biggs, A. D., Bleem, L. E., Bock, J. J., Bothwell, M., Bradford, C. M., Brodwin, M., Carlstrom, J. E., Chang, C. L., Crawford, T. M., Crites, A. T., de Haan, T., Dobbs, M. A., Fomalont, E. B., Fassnacht, C. D., George, E. M., Gladders, M. D., Gonzalez, A. H., Greve, T. R., Gullberg, B., Halverson, N. W., High, F. W., Holder, G. P., Holzapfel, W. L., Hoover, S., Hrubes, J. D., Hunter, T. R., Keisler, R., Lee, A. T., Leitch, E. M., Lueker, M., Luong-van, D., Malkan, M., McIntyre, V., McMahon, J. J., Mehl, J., Menten, K. M., Meyer, S. S., Mocanu, L. M., Murphy, E. J., Natoli, T., Padin, S., Plagge, T., Reichardt, C. L., Rest, A., Ruel, J., Ruhl, J. E., Sharon, K., Schaffer, K. K., Shaw, L., Shirokoff, E., Spilker, J. S., Stalder, B., Staniszewski, Z., Stark, A. A., Story, K., Vanderlinde, K., Welikala, N., Williamson, R.

Nature 495 344-347 (2013)

*ALMA observations of the variable <sup>12</sup>CO/<sup>13</sup>CO ratio around the asymptotic giant branch star R Sculptoris.*

W. H. T. Vlemmings, M. Maercker, M. Lindqvist, S. Mohamed, H. Olofsson, S. Ramstedt, M. Brunner, M. A. T. Groenewegen, F. Kerschbaum, and M. Wittkowski.

Astron. Astrophys. 556, L1 (2013)

*ALMA Redshifts of Millimeter-selected Galaxies from the SPT Survey: The Redshift Distribution of Dusty Star-forming Galaxies.*

Weiß, A., De Breuck, C., Marrone, D. P., Vieira, J. D., Aguirre, J. E., Aird, K. A., Aravena, M., Ashby, M. L. N., Bayliss, M., Benson, B. A., Béthermin, M., Biggs, A. D., Bleem, L. E., Bock, J. J., Bothwell, M., Bradford, C. M., Brodwin, M., Carlstrom, J. E., Chang, C. L., Chapman, S. C., Crawford, T. M., Crites, A. T., de Haan, T., Dobbs, M. A., Downes, T. P., Fassnacht, C. D., George, E. M., Gladders, M. D., Gonzalez, A. H., Greve, T. R., Halverson, N. W., Hezaveh, Y. D., High, F. W., Holder, G. P., Holzapfel, W. L., Hoover, S., Hrubes, J. D., Husband, K., Keisler, R., Lee, A. T., Leitch, E. M., Lueker, M., Luong-Van, D., Malkan, M., McIntyre, V., McMahon, J. J., Mehl, J., Menten, K. M., Meyer, S. S., Murphy, E. J., Padin, S., Plagge, T., Reichardt, C. L., Rest, A., Rosenman, M., Ruel, J., Ruhl, J. E., Schaffer, K. K., Shirokoff, E., Spilker, J. S., Stalder, B., Staniszewski, Z., Stark, A. A., Story, K., Vanderlinde, K., Welikala, N., Williamson, R.

ApJ 767, 88 (2013)

*High-J CO survey of low-mass protostars observed with Herschel-HIFI.*

Yıldız, U. A., Kristensen, L. E., van Dishoeck, E. F., San José-García, I., Karska, A., Harsono, D., Tafalla, M., Fuente, A., Visser, R., Jørgensen, J. K., Hogerheijde, M. R. A&A 556, 89 (2013)

*The global velocity field of the filament in NGC 6334.*

Zernickel, A., Schilke, P., Smith, R. J.

A&A 554 L2 (2013)

*Parallaxes for W49N and G048.60+0.02: Distant Star Forming Regions in the Perseus Spiral Arm.*

Zhang, B., Reid, M. J., Menten, K. M., Zheng, X. W., Brunthaler, A., Dame, T. M., Xu, Y.  
ApJ 775, 79 (2013)

## Astronomy: ALMA

Publications resulting from ALMA observations and with Nordic ARC node involvement.

*Robust Constraint on a Drifting Proton-to-Electron Mass Ratio at z=0.89 from Methanol Observation at Three Radio Telescopes.*

J. Bagdonaitė, M. Dapra, P. Jansen, H. L. Bethlem, W. Ubachs, S. Muller, C. Henkel, K. M. Menten.  
Phys. Rev. Lett. 111, 231101 (2013)

*A Recent Accretion Burst in the Low-mass Protostar IRAS 15398-3359: ALMA Imaging of Its Related Chemistry.*

Jes K. Jørgensen, Ruud Visser, Nami Sakai, Edwin A. Bergin, Christian Brinch, Daniel Harsono, Johan E. Lindberg, Ewine F. van Dishoeck, Satoshi Yamamoto, Suzanne E. Bisschop, and Magnus V. Persson.  
The Astrophysical Journal Letters, 779:L22 (2013)

*Carbon Monoxide in the Cold Debris of Supernova 1987A.*

J. Kamenetzky, R. McCray, R. Indebetouw, M. J. Barlow, M. Matsuura, M. Baes, J. A. D. L. Blommaert, A. Bolatto, L. Decin, L. Dunne, C. Fransson, J. Glenn, H. L. Gomez, M. A. T. Groenewegen, R. Hopwood, R. P. Kirshner, M. Lakicevic, J. Marcaide, I. Martí-Vidal, M. Meixner, P. Royer, A. Soderberg, G. Sonneborn, L. Staveley-Smith, B. M. Swinyard, G. Van de Steene, P. A. M. van Hoof, J. Th. van Loon, J. Yates, and G. Zanardo.

The Astrophysical Journal Letters, 773:L34 (2013)

*Probing the jet base of the blazar PKS1830–211 from the chromatic variability of its lensed images. Serendipitous ALMA observations of a strong gamma-ray flare.*

I. Martí-Vidal, S. Muller, F. Combes, S. Aalto, A. Beelen, J. Darling, M. Guélin, C. Henkel, C. Horellou, J. M. Marcaide, S. Martín, K. M. Menten, Dinh-V-Trung, and M. Zwaan.  
Astron. Astrophys. 558, A123 (2013)

*ALMA observations of the variable  $^{12}\text{CO}/^{13}\text{CO}$  ratio around the asymptotic giant branch star R Sculptoris.*

W. H. T. Vlemmings, M. Maercker, M. Lindqvist, S. Mohamed, H. Olofsson, S. Ramstedt, M. Brunner, M. A. T. Groenewegen, F. Kerschbaum, and M. Wittkowski.  
Astron. Astrophys. 556, L1 (2013)

## Astronomy: VLBI

Publications resulting from observations with EVN and GMVA, or using JIVE.

*The radio structure of 3C 316, a galaxy with double-peaked narrow optical emission lines.*  
An, T., Paragi, Z., Frey, S., Xiao, T., Baan, W.-A., Komossa, S., Gabanyi, K.-E., Xu, Y.-H.,  
Hong, X.-Y.

Monthly Notices of the Royal Astronomical Society 433, 1161-1171. (2013)

*Probing the nature of compact ultrasteep spectrum radio sources with the e-EVN and e-MERLIN.*

Argo, M.-K., Paragi, Z., Rottgering, H., Klockner, H.-R., Miley, G., Mahmud, M. Monthly  
Notices of the Royal Astronomical Society 431, L58-L62. (2013)

*The NGC 3341 minor merger: a panchromatic view of the active galactic nucleus in a dwarf  
companion.*

Bianchi, S., Piconcelli, E., Perez-Torres, M.-A., Fiore, F., La Franca, F., Mathur, S., Matt, G.  
Monthly Notices of the Royal Astronomical Society 435, 2335-2344. (2013)

*An AIPS-based, distributed processing method for large radio interferometric datasets.*

Bourke, S., van Langevelde, H.-J., Torstensson, K., Golden, A.  
Experimental Astronomy 36, 59-76. (2013)

*XTE J1752-223 in outburst: a persistent radio jet, dramatic flaring, multiple ejections and  
linear polarization.*

Brockopp, C., Corbel, S., Tzioumis, T., Broderick, J., Rodriguez, J., Yang, J., Fender, R.,  
Paragi, Z.

Monthly Notices of the Royal Astronomical Society 432, 931-943 (2013)

*The parsec-scale structure of radio-loud broad absorption line quasars.*

Bruni, G., Dallacasa, D., Mack, K.-H., Montenegro-Montes, F.-M., Gonzalez-Serrano, J.-I.,  
Holt, J., Jimenez-Lujan, F.

Astronomy and Astrophysics 554, A94. (2013)

*Deep, widefield, global VLBI observations of the Hubble deep field north (HDF-N) and  
flanking fields (HFF).*

Chi, S., Barthel, P.-D., Garrett, M.-A.

Astronomy and Astrophysics 550, A68. (2013)

*High-resolution mm and cm study of the obscured LIRG NGC 4418. A compact obscured  
nucleus fed by in-falling gas?*

F. Costagliola, S. Aalto, K. Sakamoto, S. Martín, R. Beswick, S. Muller, and H.-R. Klöckner.  
Astron. Astrophys. 556, A66 (2013)

*A sample of small-sized compact steep-spectrum radio sources: VLBI images and VLA  
polarization at 5 GHz.*

Dallacasa, D., Orienti, M., Fanti, C., Fanti, R., Stanghellini, C.

Monthly Notices of the Royal Astronomical Society 433, 147-161. (2013)

*The preferentially magnified active nucleus in IRAS F10214+4724 - III. VLBI observations of the radio core.*

Deane, R.-P., Rawlings, S., Garrett, M.-A., Heywood, I., Jarvis, M.-J., Klockner, H.-R., Marshall, P.-J., McKean, J.-P.

Monthly Notices of the Royal Astronomical Society 434, 3322-3336. (2013)

*Multifrequency VLBI Observations of the Broad Absorption Line Quasar J1020+4320: Recently Restarted Jet Activity?*

Doi, A., et al.

Publications of the Astronomical Society of Japan 65, 57. (2013)

*A compact radio source in the high-redshift soft gamma-ray blazar IGR J12319-0749.*

Frey, S., Paragi, Z., Gabanyi, K.-E., An, T.

Astronomy and Astrophysics 552, A109. (2013)

*Very Long Baseline Interferometry Search for the Radio Counterpart of HESS J1943+213.*

Gabanyi, K.-E., Dubner, G., Giacani, E., Paragi, Z., Frey, S., Pidopryhora, Y.

The Astrophysical Journal 762, 63. (2013)

*A candidate supermassive binary black hole system in the brightest cluster galaxy of RBS 797.*

Gitti, M., Giroletti, M., Giovannini, G., Feretti, L., Liuzzo, E.

Astronomy and Astrophysics 557, L14. (2013)

*The Spatiokinematical Structure of H<sub>2</sub>O and OH Masers in the "Water Fountain" Source IRAS 18460-0151.*

Imai, H., Deguchi, S., Nakashima, J.-i., Kwok, S., Diamond, P.-J.

The Astrophysical Journal 773, 182. (2013)

*Exploration of a Relic Circumstellar Envelope in the "Water Fountain" Source IRAS 18286-0959.*

Imai, H., Nakashima, J.-i., Yung, B.-H.-K., Deguchi, S., Kwok, S., Diamond, P.-J.

The Astrophysical Journal 771, 47. (2013)

*Intrinsic Brightness Temperature of Compact Radio Sources at 86 GHz,*

Lee, S.S.,

Journal of the Korean Astronomical Society, 46, 243 (2013)

*Milliarcsec-scale radio emission of ultraluminous X-ray sources: steady jet emission from an intermediate-mass black hole?*

Mezcua, M., Farrell, S.A., Gladstone, J.C., Lobanov, A.P.

Monthly Notices of the Royal Astronomical Society 436, 1546-1554 (2013)

*The resolved structure of the extragalactic supernova remnant SNR 4449-1.*

M. Mezcua, A. P. Lobanov and I. Martí-Vidal.

Mon. Not. R. Astron. Soc. 436, 2454–2460 (2013)

*Radio Jets Clearing the Way Through a Galaxy: Watching Feedback in Action.*

Raffaella Morganti, Judit Fogasy, Zsolt Paragi, Tom Oosterloo, Monica Orienti.

Science, vol. 341, p.1082 (2013)

*A double-jet system in the G31.41 + 0.31 hot molecular core.*  
Moscadelli, L., Li, J.-J., Cesaroni, R., Sanna, A., Xu, Y., Zhang, Q.  
Astronomy and Astrophysics 549, A122. (2013)

*Radio Continuum Surveys with Square Kilometre Array Pathfinders.*  
Norris, R.-P., et al.  
Publications of the Astronomical Society of Australia 30, e020. (2013)

*Sub-parsec radio cores in nearby Seyfert galaxies.*  
Panessa, F., Giroletti, M.  
Monthly Notices of the Royal Astronomical Society 432, 1138-1143. (2013)

*VLBI observations of the shortest orbital period black hole binary, MAXI J1659-152.*  
Paragi, Z., et al  
Monthly Notices of the Royal Astronomical Society 432, 1319-1329. (2013)

*The Catalog of Positions of Optically Bright Extragalactic Radio Sources OBRS-2.*  
Petrov, L.  
The Astronomical Journal 146, 5. (2013)

*Radio and X-ray observations of jet ejection in Cygnus X-2.*  
Spencer, R.-E., Rushton, A.-P., Balucinska-Church, M., Paragi, Z., Schulz, N.-S., Wilms, J.,  
Pooley, G.-G., Church, M.-J.  
Monthly Notices of the Royal Astronomical Society 435, L48-L52. (2013)

*EVN observations of 6.7 GHz methanol maser polarization in massive star-forming regions II. First statistical results.*  
G. Surcis, W. H. T. Vlemmings, H. J. van Langevelde, B. Hutawarakorn Kramer, and  
L. H. Quiroga-Nuñez.  
Astron. Astrophys. 556, A73 (2013)

*Very long baseline interferometry astrometry of PSR B1257+12, a pulsar with a planetary system.*  
Yan, Z., Shen, Z.-Q., Yuan, J.-P., Wang, N., Rottmann, H., Alef, W.  
Monthly Notices of the Royal Astronomical Society 433, 162-169. (2013)

*Hunting for dark halo substructure using submilliarcsecond-scale observations of macrolensed radio jets.*  
Zackrisson, E., et al.  
Monthly Notices of the Royal Astronomical Society 431, 2172-2183 (2013)

*Evidence for a large-scale helical magnetic field in the quasar 3C 454.3,*  
Zamaninasab, M., Savolainen, T., Clausen-Brown, E., Hovatta, T., Lister, M.L., Krichbaum,  
T.P., Kovalev, Y.Y., Pushkarev, A.B.  
MNRAS, 436, 3341. (2013)

## Astronomy: LOFAR

*LOFAR detections of low-frequency radio recombination lines towards Cassiopeia A.*  
A. Asgekar, J. B. R. Oonk, S. Yatawatta, R. J. van Weeren, J. P. McKean, G. White,  
N. Jackson, J. Anderson, I. M. Avruch, F. Batejat, R. Beck, M. E. Bell, M. R. Bell, I. van  
Bemmel, M. J. Bentum, G. Bernardi, P. Best, L. Bîrzan, A. Bonafede, R. Braun, F. Breitling,  
R. H. van de Brink, J. Broderick, W. N. Brouw, M. Brüggen, H. R. Butcher, W. van  
Cappellen, B. Ciardi, J. E. Conway, F. de Gasperin, E. de Geus, A. de Jong, M. de Vos,  
S. Duscha, J. Eisloffel, H. Falcke, R. A. Fallows, C. Ferrari, W. Frieswijk, M. A. Garrett, J.-  
M. Grießmeier, T. Grit, A. W. Gunst, T. E. Hassall, G. Heald, J. W. T. Hessels, M. Hoeft,  
M. Iacobelli, H. Intema, E. Juette, A. Karastergiou, J. Kohler, V. I. Kondratiev, M. Kuniyoshi,  
G. Kuper, C. Law, J. van Leeuwen, P. Maat, G. Macario, G. Mann, S. Markoff, D. McKay-  
Bukowski, M. Mevius, J. C. A. Miller-Jones, J. D. Mol, R. Morganti, D. D. Mulcahy,  
H. Munk, M. J. Norden, E. Orru, H. Paas, M. Pandey-Pommier, V. N. Pandey, R. Pizzo,  
A. G. Polatidis, W. Reich, H. Röttgering, B. Scheers, A. Schoenmakers, J. Sluman,  
O. Smirnov, C. Sobey, M. Steinmetz, M. Tagger, Y. Tang, C. Tasse, R. Vermeulen, C. Vocks,  
R. A. M. J. Wijers, M. W. Wise, O. Wucknitz, and P. Zarka.  
Astron. Astrophys. 551, L11 (2013)

*The Dynamic Spectrum of Interplanetary Scintillation: First Solar Wind Observations on  
LOFAR.*

Fallows, R. A., Asgekar, A., Bisi, M. M., et al.,  
Solar Physics 285, 127 (2013)

*LOFAR: The LOw-Frequency Array.*

M. P. van Haarlem, M. W. Wise, A. W. Gunst, G. Heald, J. P. McKean, J. W. T. Hessels,  
A. G. de Bruyn, R. Nijboer, J. Swinbank, R. Fallows, M. Brentjens, A. Nelles, R. Beck,  
H. Falcke, R. Fender, J. Hörandel, L. V. E. Koopmans, G. Mann, G. Miley, H. Röttgering,  
B. W. Stappers, R. A. M. J. Wijers, S. Zaroubi, M. van den Akker, A. Alexov, J. Anderson,  
K. Anderson, A. van Ardenne, M. Arts, A. Asgekar, I. M. Avruch, F. Batejat, L. Bähren,  
M. E. Bell, M. R. Bell, I. van Bemmel, P. Bennema, M. J. Bentum, G. Bernardi, P. Best,  
L. Bîrzan, A. Bonafede, A.-J. Boonstra, R. Braun, J. Bregman, F. Breitling, R. H. van de  
Brink, J. Broderick, P. C. Broekema, W. N. Brouw, M. Brüggen, H. R. Butcher, W. van  
Cappellen, B. Ciardi, T. Coenen, J. Conway, A. Coolen, A. Corstanje, S. Damstra, O. Davies,  
A. T. Deller, R.-J. Dettmar, G. van Diepen, K. Dijkstra, P. Donker, A. Doorduin, J. Dromer,  
M. Drost, A. van Duin, J. Eisloffel, J. van Enst, C. Ferrari, W. Frieswijk, H. Gankema,  
M. A. Garrett, F. de Gasperin, M. Gerbers, E. de Geus, J.-M. Grießmeier, T. Grit, P. Gruppen,  
J. P. Hamaker, T. Hassall, M. Hoeft, H. A. Holties, A. Horner; , A. van der Horst, A. van  
Houwelingen, A. Huijgen, M. Iacobelli, H. Intema; , N. Jackson, V. Jelic, A. de Jong,  
E. Juette, D. Kant, A. Karastergiou, A. Koers, H. Kollen, V. I. Kondratiev, E. Kooistra,  
Y. Koopman, A. Koster, M. Kuniyoshi, M. Kramer, G. Kuper, P. Lambropoulos, C. Law,  
J. van Leeuwen, J. Lemaitre, M. Loose, P. Maat, G. Macario, S. Marko, J. Masters,  
R. A. McFadden, D. McKay-Bukowski, H. Meijering, H. Meulman, M. Mevius,  
E. Middelberg, R. Millenaar, J. C. A. Miller-Jones, R. N. Mohan, J. D. Mol, J. Morawietz,  
R. Morganti, D. D. Mulcahy, E. Mulder, H. Munk, L. Nieuwenhuis, R. van Nieuwpoort,  
J. E. Noordam, M. Norden, A. Noutsos, A. R. Offringa, H. Olofsson, A. Omar, E. Orrú,  
R. Overeem, H. Paas, M. Pandey-Pommier, V. N. Pandey, R. Pizzo, A. Polatidis, D. Rafferty,  
S. Rawlings, W. Reich, J.-P. de Reijer, J. Reitsma, G. A. Renting, P. Riemsers, E. Rol,  
J. W. Romein, J. Roosjen, M. Ruiter, A. Scaife, K. van der Schaaf, B. Scheers; , P. Schellart,  
A. Schoenmakers, G. Schoonderbeek, M. Serylak, A. Shulevski, J. Sluman, O. Smirnov,

C. Sobey, H. Spreeuw, M. Steinmetz, C. G. M. Sterks, H.-J. Stiepel, K. Stuurwold, M. Tagger, Y. Tang, C. Tasse, I. Thomas, S. Thoudam, M. C. Toribio, B. van der Tol, O. Usov, M. van Veelen, A.-J. van der Veen, S. ter Veen, J. P. W. Verbiest, R. Vermeulen, N. Vermaas, C. Vocks, C. Vogt, M. de Vos, E. van der Wal, R. van Weeren, H. Weggemans, P. Weltevrede, S. White, S. J. Wijnholds, T. Wilhelmsson, O. Wucknitz, S. Yatawatta, P. Zarka, A. Zensus, and J. van Zwieten.

Astron. Astrophys. 556, A2 (2013)

*Differential frequency-dependent delay from the pulsar magnetosphere.*

T. E. Hassall, B. W. Stappers, P. Weltevrede, J. W. T. Hessels, A. Alexov, T. Coenen, A. Karastergiou, M. Kramer, E. F. Keane, V. I. Kondratiev, J. van Leeuwen, A. Noutsos, M. Pilia, M. Serylak, C. Sobey, K. Zagkouris, R. Fender, M. E. Bell, J. Broderick, J. Eislöffel, H. Falcke, J.-M. Grießmeier, M. Kuniyoshi, J. C. A. Miller-Jones, M. W. Wise, O. Wucknitz, P. Zarka, A. Asgekar, F. Batejat, M. J. Bentum, G. Bernardi, P. Best, A. Bonafede, F. Breitling, M. Brüggen, H. R. Butcher, B. Ciardi, F. de Gasperin, J.-P. de Reijer, S. Duscha, R. A. Fallows, C. Ferrari, W. Frieswijk, M. A. Garrett, A. W. Gunst, G. Heald, M. Hoeft, E. Juette, P. Maat, J. P. McKean, M. J. Norden, M. Pandey-Pommier, R. Pizzo, A. G. Polatidis, W. Reich, H. Röttgering, J. Sluman, Y. Tang, C. Tasse, R. Vermeulen, R. J. van Weeren; S. J. Wijnholds, and S. Yatawatta.

Astron. Astrophys. 552, A61 (2013)

*Synchronous X-ray and Radio Mode Switches: A Rapid Global Transformation of the Pulsar Magnetosphere.*

W. Hermsen, J. W. T. Hessels, L. Kuiper, J. van Leeuwen, D. Mitra, J. de Plaa, J. M. Rankin, B. W. Stappers, G. A. E. Wright, R. Basu, A. Alexov, T. Coenen, J.-M. Grießmeier, T. E. Hassall, A. Karastergiou, E. Keane, V. I. Kondratiev, M. Kramer, M. Kuniyoshi, A. Noutsos, M. Serylak, M. Pilia, C. Sobey, P. Weltevrede, K. Zagkouris, A. Asgekar, I. M. Avruch, F. Batejat, M. E. Bell, M. R. Bell, M. J. Bentum, G. Bernardi, P. Best, L. Bîrzan, A. Bonafede, F. Breitling, J. Broderick, M. Brüggen, H. R. Butcher, B. Ciardi, S. Duscha, J. Eislöffel, H. Falcke, R. Fender, C. Ferrari, W. Frieswijk, M. A. Garrett, F. de Gasperin, E. de Geus, A. W. Gunst, G. Heald, M. Hoeft, A. Horneffer, M. Iacobelli, G. Kuper, P. Maat, G. Macario, S. Markoff, J. P. McKean, M. Mevius, J. C. A. Miller-Jones, R. Morganti, H. Munk, E. Orrú, H. Paas, M. Pandey-Pommier, V. N. Pandey, R. Pizzo, A. G. Polatidis, S. Rawlings, W. Reich, H. Röttgering, A. M. M. Scaife, A. Schoenmakers, A. Shulevski, J. Sluman, M. Steinmetz, M. Tagger, Y. Tang, C. Tasse, S. ter Veen, R. Vermeulen, R. H. van de Brink, R. J. van Weeren, R. A. M. J. Wijers, M. W. Wise, O. Wucknitz, S. Yatawatta, P. Zarka.

Science 339, 436 (2013)

*Studying Galactic interstellar turbulence through fluctuations in synchrotron emission. First LOFAR Galactic foreground detection.*

M. Iacobelli, M. Havercorn, E. Orrú, R. F. Pizzo, J. Anderson, R. Beck, M. R. Bell, A. Bonafede, K. Chyzy, R.-J. Dettmar, T. A. Enßlin, G. Heald, C. Horellou, A. Horneffer, W. Jurusik, H. Junklewitz, M. Kuniyoshi, D. D. Mulcahy, R. Paladino, W. Reich, A. Scaife, C. Sobey, C. Sotomayor-Beltran, A. Alexov, A. Asgekar, I.M. Avruch, M. E. Bell, I. van Bemmel, M. J. Bentum, G. Bernardi, P. Best, L. Bîrzan, F. Breitling, J. Broderick, W. N. Brouw, M. Brüggen, H. R. Butcher, B. Ciardi, J. E. Conway, F. de Gasperin, E. de Geus, S. Duscha, J. Eislöffel, D. Engels, H. Falcke, R. A. Fallows, C. Ferrari, W. Frieswijk, M. A. Garrett, J. Grießmeier, A. W. Gunst, J. P. Hamaker, T. E. Hassall, J. W. T. Hessels, M. Hoeft, J. Hörandel, V. Jelic, A. Karastergiou, V. I. Kondratiev, L. V. E. Koopmans,

M. Kramer, G. Kuper, J. van Leeuwen, G. Macario, G. Mann, J. P. McKean, H. Munk, M. Pandey-Pommier, A. G. Polatidis, H. Röttgering, D. Schwarz, J. Sluman, O. Smirnov, B. W. Stappers, M. Steinmetz, M. Tagger, Y. Tang, C. Tasse, C. Toribio, R. Vermeulen, C. Vocks, C. Vogt, R. J. van Weeren, M. W. Wise, O. Wucknitz, S. Yatawatta, P. Zarka, and A. Zensus.

Astron. Astrophys. 558, A72 (2013)

*PSR B1133+16: radio emission height and plasma composition.*

Jones, P. B.,  
MNRAS 435, L11

*The LOFAR radio environment.*

A. R. Offringa, A. G. de Bruyn, S. Zaroubi, G. van Diepen, O. Martinez-Ruby, P. Labropoulos, M. A. Brentjens, B. Ciardi, S. Daiboo, G. Harker, V. Jelić, S. Kazemi, L. V. E. Koopmans, G. Mellema, V. N. Pandey, R. F. Pizzo, J. Schaye, H. Vedantham, V. Veligatla, S. J. Wijnholds, S. Yatawatta, P. Zarka, A. Alexov, J. Anderson, A. Asgekar, M. Avruch, R. Beck, M. Bell, M. R. Bell, M. Bentum, G. Bernardi, P. Best, L. Birzan, A. Bonafede, F. Breitling, J. W. Broderick, M. Brüggen, H. Butcher, J. Conway, M. de Vos, R. J. Dettmar, J. Eisloeffel, H. Falcke, R. Fender, W. Frieswijk, M. Gerbers, J. M. Griessmeier, A. W. Gunst, T. E. Hassall, G. Heald, J. Hessels, M. Hoeft, A. Horneffer, A. Karastergiou, V. Kondratiev, Y. Koopman, M. Kuniyoshi, G. Kuper, P. Maat, G. Mann, J. McKean, H. Meulman, M. Mevius, J. D. Mol, R. Nijboer, J. Noordam, M. Norden, H. Paas, M. Pandey, R. Pizzo, A. Polatidis, D. Rafferty, S. Rawlings, W. Reich, H. J. A. Röttgering, A. P. Schoenmakers, J. Sluman, O. Smirnov, C. Sobey, B. Stappers, M. Steinmetz, J. Swinbank, M. Tagger, Y. Tang, C. Tasse, A. van Ardenne, W. van Cappellen, A. P. van Duin, M. van Haarlem, J. van Leeuwen, R. J. van Weeren, R. Vermeulen, C. Vocks, R. A. M. J. Wijers, M. Wise, and O. Wucknitz.

Astron. Astrophys. 549, A11 (2013)

*The brightness and spatial distributions of terrestrial radio sources.*

A. R. Offringa, A. G. de Bruyn, S. Zaroubi, L. V. E. Koopmans, S. J. Wijnholds, F. B. Abdalla, W. N. Brouw, B. Ciardi, I. T. Iliev, G. J. A. Harker, G. Mellema, G. Bernardi, P. Zarka, A. Ghosh, A. Alexov, J. Anderson, A. Asgekar, I. M. Avruch, R. Beck, M. E. Bell, M. R. Bell, M. J. Bentum, P. Best, L. Birzan, F. Breitling, J. Broderick, M. Brüggen, H. R. Butcher, F. de Gasperin, E. de Geus, M. de Vos, S. Duscha, J. Eisloeffel, R. A. Fallows, C. Ferrari, W. Frieswijk, M. A. Garrett, J. Grießmeier, T. E. Hassall, A. Horneffer, M. Iacobelli, E. Juette, A. Karastergiou, W. Klijn, V. I. Kondratiev, M. Kuniyoshi, G. Kuper, J. van Leeuwen, M. Loose, P. Maat, G. Macario, G. Mann, J. P. McKean, H. Meulman, M. J. Norden, E. Orru, H. Paas, M. Pandey-Pommier, R. Pizzo, A. G. Polatidis, D. Rafferty, W. Reich, R. van Nieuwpoort, H. Röttgering, A. M. M. Scaife, J. Sluman, O. Smirnov, C. Sobey, M. Tagger, Y. Tang, C. Tasse, S. ter Veen, C. Toribio, R. Vermeulen, C. Vocks, R. J. van Weeren, M. W. Wise, and O. Wucknitz.

Mon. Not. R. Astron. Soc. 435, 584–596 (2013)

*Toward a Comprehensive Model for Feedback by Active Galactic Nuclei: New Insights from M87 Observations by LOFAR, Fermi, and H.E.S.S.*

Pfrommer, Christoph  
ApJ 779, 10 (2013)

*Detecting cosmic rays with the LOFAR radio telescope.*

Schellart, P., Nelles, A., Buitink, S., et al.

A&A 560, A98 (2013)

*Calibrating high-precision Faraday rotation measurements for LOFAR and the next generation of low-frequency radio telescopes.*

Sotomayor-Beltran, C., Sobey, C., Hessels, J. W. T., et al.

A&A 552, A58 (2013)

*Applying full polarization A-Projection to very wide field of view instruments: An imager for LOFAR.*

Tasse, C., van der Tol, S., van Zwieten, J., et al.,

A&A 553, A105 (2013)

*Initial deep LOFAR observations of epoch of reionization windows. I. The north celestial pole.*

S. Yatawatta, A. G. de Bruyn, M. A. Brentjens, P. Labropoulos, V. N. Pandey, S. Kazemi, S. Zaroubi, L. V. E. Koopmans, A. R. Offringa, V. Jelic, O. Martinez Rubi, V. Veligatla, S. J. Wijnholds, W. N. Brouw, G. Bernardi, B. Ciardi, S. Daiboo, G. Harker, G. Mellema, J. Schaye, R. Thomas, H. Vedantham, E. Chapman, F. B. Abdalla, A. Alexov, J. Anderson, I. M. Avruch, F. Batejat, M. E. Bell, M. R. Bell, M. Bentum, P. Best, A. Bonafede, J. Bregman, F. Breitling, R. H. van de Brink, J. W. Broderick, M. Brüggen, J. Conway, F. de Gasperin, E. de Geus, S. Duscha, H. Falcke, R. A. Fallows, C. Ferrari, W. Frieswijk, M. A. Garrett, J. M. Griessmeier, A. W. Gunst, T. E. Hassall, J. W. T. Hessels, M. Hoeft, M. Iacobelli, E. Juette, A. Karastergiou, V. I. Kondratiev, M. Kramer, M. Kuniyoshi, G. Kuper, J. van Leeuwen, P. Maat, G. Mann, J. P. McKean, M. Mevius, J. D. Mol, H. Munk, R. Nijboer, J. E. Noordam, M. J. Norden, E. Orru, H. Paas, M. Pandey-Pommier, R. Pizzo, A. G. Polatidis, W. Reich, H. J. A. Röttgering, J. Sluman, O. Smirnov, B. Stappers, M. Steinmetz, M. Tagger, Y. Tang, C. Tasse, S. ter Veen, R. Vermeulen, R. J. van Weeren, M. Wise, O. Wucknitz, and P. Zarka.

Astron. Astrophys. 550, A136 (2013)

## Geoscience

*Investigation of crustal motion in Europe by analysing the European VLBI sessions.*

Krásná, Hana; Ros, Claudia Tierno; Pavetich, Peter; et al.

Acta Geodaetica et Geophysica, 48(4), 389-404, doi: 10.1007/s40328-013-0034-4 (2013)

*Tidal Love and Shida numbers estimated by geodetic VLBI.*

H. Krásná, J. Böhm, H. Schuh.

J. Geodyn. 70, 21– 27., doi: 10.1016/j.jog.2013.05.001 (2013)

*Free Core Nutation observed by VLBI.*

H. Krásná, J. Böh, and H. Schuh.

Astronomy & Astrophysics 555, A29, doi: 10.1051/0004-6361/201321585 (2013)

*GPT2: Empirical slant delay model for radio space geodetic techniques.*

K. Lagler, M. Schindelegger, J. Böhm, H. Krasna, and T. Nilsson,

Geophys. Res. Lett., Vol. 40 (6), 1069-1073, doi:10.1002/grl.50288 (2013)

*Coastal Sea Level Measurements Using a Single Geodetic GPS Receiver.*

K. Larson, J. S. Löfgren, R. Haas.

Adv. Space Res., 51 (8) pp. 1301-1310, doi: 10.1016/j.asr.2012.04.017 (2013)

*Automated and continual determination of radio telescope reference points with sub-mm accuracy: results from a campaign at the Onsala Space Observatory.*

M. Lösler, R. Haas, and C. Eschelbach,

J. Geod., 87 (8) p. 791-804, doi: 10.1007/s00190-013-0647-y (2013)

*Free core nutation and geomagnetic jerks.*

Z. Malkin,

J. Geodyn., 72, 53-58, doi: 10.1016/j.jog.2013.06.001 (2013)

*Evaluation of the atmospheric water vapor content in a regional climate model using ground-based GPS measurements.*

T. Ning, G. Elgered, U. Willén, and J. M. Johansson,

J. Geophys. Res., 118 (2) p. 329-339, doi:10.1029/2012JD018053 (2013)

*Troposphere delays from space geodetic techniques, water vapor radiometers, and numerical weather models over a series of continuous VLBI campaigns.*

K. Teke, T. Nilsson, J. Böhm, T. Hobiger, P. Steigenberger, S. García-Espada, R. Haas, P. Willis.

J. Geod., 87 (10-12) p. 981-1001, doi: 10.1007/s00190-013-0662-z (2013)

*Stochastic modeling of high-stability ground clocks in GPS analysis.*

Kan Wang, K., and Rothacher, M.,

J. Geod., 87, 427–437 doi:10.1007/s00190-013-0616-5 (2013)