

## Full list of publications

- [1] Maria Berti, Marta Spinelli, and Matteo **Viel**. Multipole expansion for 21cm Intensity Mapping power spectrum: forecasted cosmological parameters estimation for the SKA Observatory. *arXiv e-prints*, page arXiv:2209.07595, September 2022.
- [2] G. Parimbelli, E. Branchini, M. **Viel**, F. Villaescusa-Navarro, and J. ZuHone. Studying the Warm Hot Intergalactic Medium in emission: a reprise. *arXiv e-prints*, page arXiv:2209.00657, September 2022.
- [3] Matteo Esposito, Vid Iršič, Matteo Costanzi, Stefano Borgani, Alexandro Saro, and Matteo **Viel**. Weighing cosmic structures with clusters of galaxies and the intergalactic medium. *MNRAS*, 515(1):857–870, September 2022.
- [4] Euclid Collaboration, T. Castro, A. Fumagalli, R. E. Angulo, S. Bocquet, S. Borgani, C. Carbone, J. Dakin, K. Dolag, C. Giocoli, P. Monaco, A. Ragagnin, A. Saro, E. Sefusatti, M. Costanzi, A. Amara, L. Amendola, M. Baldi, R. Bender, C. Bodendorf, E. Branchini, M. Brescia, S. Camera, V. Capobianco, J. Carretero, M. Castellano, S. Cavuoti, A. Cimatti, R. Cledassou, G. Congedo, L. Conversi, Y. Copin, L. Corcione, F. Courbin, A. Da Silva, H. Degaudenzi, M. Douspis, F. Dubath, C. A. J. Duncan, X. Dupac, S. Farrens, S. Ferriol, P. Fosalba, M. Frailis, E. Franceschi, S. Galeotta, B. Garilli, B. Gillis, A. Grazian, F. Gruppi, S. V. H. Haugan, F. Hormuth, A. Hornstrup, P. Hudelot, K. Jahnke, S. Kermiche, T. Kitching, M. Kunz, H. Kurki-Suonio, P. B. Lilje, I. Lloro, O. Mansutti, O. Marggraf, M. Meneghetti, E. Merlin, G. Meylan, M. Moresco, L. Moscardini, E. Munari, S. M. Niemi, C. Padilla, S. Paltani, F. Pasian, K. Pedersen, V. Pettorino, S. Pires, G. Polenta, M. Poncet, L. Popa, L. Pozzetti, F. Raison, R. Rebolo, A. Renzi, J. Rhodes, G. Riccio, E. Romelli, R. Saglia, D. Sapone, B. Sartoris, P. Schneider, G. Seidel, G. Sirri, L. Stanco, P. Tallada Crespí, A. N. Taylor, R. Toledo-Moreo, F. Torradeflot, I. Tutusaus, E. A. Valentijn, L. Valenziano, T. Vassallo, Y. Wang, J. Weller, A. Zacchei, G. Zamorani, S. Andreon, S. Bardelli, E. Bozzo, C. Colodro-Conde, D. Di Ferdinando, M. Farina, J. Graciá-Carpio, V. Lindholm, C. Neissner, V. Scottez, M. Tenti, E. Zucca, C. Baccigalupi, A. Balaguera-Antolínez, M. Ballardini, F. Bernardeau, A. Biviano, A. Blanchard, A. S. Borlaff, C. Burigana, R. Cabanac, A. Cappi, C. S. Carvalho, S. Casas, G. Castignani, A. Cooray, J. Coupon, H. M. Courtois, S. Davini, G. De Lucia, G. Desprez, H. Dole, J. A. Escartin, S. Escoffier, F. Finelli, K. Ganga, J. Garcia-Bellido, K. George, G. Gozaliasl, H. Hildebrandt, I. Hook, S. Ilić, V. Kansal, E. Keihanen, C. C. Kirkpatrick, A. Loureiro, J. Macias-Perez, M. Magliocchetti, R. Maoli, S. Marcin, M. Martinelli, N. Martinet, S. Matthew, M. Maturi, R. B. Metcalf, G. Morgante, S. Nadathur, A. A. Nucita, L. Patrizii, A. Peel, V. Popa, C. Porciani, D. Potter, A. Pourtsidou, M. Pöntinen, A. G. Sánchez, Z. Sakr, M. Schirmer, M. Sereno, A. Spurio Mancini, R. Teyssier, J. Valiviita, A. Veropalumbo, and M. **Viel**. Euclid preparation. XXIV. Calibration of the halo mass function in  $\Lambda(\nu)$ CDM cosmologies. *arXiv e-prints*, page arXiv:2208.02174, August 2022.
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- [6] Ewald Puchwein, James S. Bolton, Laura C. Keating, Margherita Molaro, Prakash Gaikwad, Girish Kulkarni, Martin G. Haehnelt, Vid Iršič, Tomáš Šoltinský, Matteo **Viel**, Dominique Aubert, George D. Becker, and Avery Meiksin. The Sherwood-Relics simulations: overview and impact of patchy reionization and pressure smoothing on the intergalactic medium. *arXiv e-prints*, page arXiv:2207.13098, July 2022.
- [7] Euclid Collaboration, L. Bisigello, C. J. Conselice, M. Baes, M. Bolzonella, M. Brescia, S. Cavuoti, O. Cucciati, A. Humphrey, L. K. Hunt, C. Maraston11, L. Pozzetti, C. Tortora, S. E. van Mierlo, N. Aghanim, N. Auricchio, M. Baldi, R. Bender, C. Bodendorf, D. Bonino, E. Branchini, J. Brinchmann, S. Camera, V. Capobianco, C. Carbone, J. Carretero, F. J. Castander, M. Castellano, A. Cimatti, G. Congedo, L. Conversi, Y. Copin, L. Corcione, F. Courbin, M. Cropper, A. Da Silva, H. Degaudenzi, M. Douspis, F. Dubath, C. A. J. Duncan, X. Dupac, S. Dusini, S. Farrens, S. Ferriol, M. Frailis, E. Franceschi, P. Franzetti, M. Fumana, B. Garilli, W. Gillard, B. Gillis, C. Giocoli, A. Grazian, F. Grupp, L. Guzzo, S. V. H. Haugan, W. Holmes, F. Hormuth, A. Hornstrup, K. Jahnke, M. Kümmel, S. Kermiche, A. Kiessling, M. Kilbinger, R. Kohley, M. Kunz, H. Kurki-Suonio, S. Ligi, P. B. Lilje, I. Lloro, E. Maiorano, O. Mansutti, O. Marggraf, K. Markovic, F. Marulli, R. Massey, S. Maurogordato, E. Medinaceli, M. Meneghetti, E. Merlin, G. Meylan, M. Moresco, L. Moscardini, E. Munari, S. M. Niemi, C. Padilla, S. Paltani, F. Pasian, K. Pedersen, V. Pettorino, G. Polenta, M. Poncet, L. Popa, F. Raison, A. Renzi, J. Rhodes, G. Ric-

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- [10] James S. Bolton, Prakash Gaikwad, Martin G. Haehnelt, Tae-Sun Kim, Fahad Nasir, Ewald Puchwein, Matteo **Viel**, and Bart P. Wakker. Limits on non-canonical heating and turbulence in the intergalactic medium from the low redshift Lyman  $\alpha$  forest. *MNRAS*, 513(1):864–885, June 2022.
- [11] Euclid Collaboration, R. Scaramella, J. Amiaux, Y. Mellier, C. Burigana, C. S. Carvalho, J. C. Cuillandre, A. Da Silva, A. Derosa, J. Dinis, E. Maiorano, M. Maris, I. Tereno, R. Laureijs, T. Boenke, G. Buenadicha, X. Dupac, L. M. Gaspar Venancio, P. Gómez-Álvarez, J. Hoar, J. Lorenzo Alvarez, G. D. Racca, G. Saavedra-Criado, J. Schwartz, R. Vavrek, M. Schirmer, H. Aussel, R. Azzollini, V. F. Cardone, M. Cropper, A. Ealet, B. Garilli, W. Gillard, B. R. Granett, L. Guzzo, H. Hoekstra, K. Jahnke, T. Kitching, T. Maciaszek, M. Meneghetti, L. Miller, R. Nakajima, S. M. Niemi, F. Pasian, W. J. Percival, S. Pottinger, M. Sauvage, M. Scodreggio, S. Wachter, A. Zaccchi, N. Aghanim, A. Amara, T. Auphan, N. Auricchio, S. Awan, A. Balestra, R. Bender, C. Bodendorf, D. Bonino, E. Branchini, S. Brau-Nogue, M. Brescia, G. P. Candini, V. Capobianco, C. Carbone, R. G. Carlberg, J. Carretero, R. Casas, F. J. Castander, M. Castellano, S. Cavuoti, A. Cimatti, R. Cledasou, G. Congedo, C. J. Conselice, L. Conversi, Y. Copin, L. Corcione, A. Costille, F. Courbin, H. Degaudenzi, M. Douspis, F. Dubath, C. A. J. Duncan, S. Dusini, S. Farrens, S. Ferriol, P. Fosalba, N. Fourmanoit, M. Frailis, E. Franceschi, P. Franzetti, M. Fumana, B. Gillis,

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