

## Full list of publications

- [1] É. Aubourg, S. Bailey, J. E. Bautista, F. Beutler, V. Bhardwaj, D. Bizyaev, M. Blanton, M. Blomqvist, A. S. Bolton, J. Bovy, H. Brewington, J. Brinkmann, J. R. Brownstein, A. Burden, N. G. Busca, W. Carithers, C.-H. Chuang, J. Comparat, A. J. Cuesta, K. S. Dawson, T. Delubac, D. J. Eisenstein, A. Font-Ribera, J. Ge, J.-M. Le Goff, S. G. A Gontcho, J. R. Gott, III, J. E. Gunn, H. Guo, J. Guy, J.-C. Hamilton, S. Ho, K. Honscheid, C. Howlett, D. Kirkby, F. S. Kitaura, J.-P. Kneib, K.-G. Lee, D. Long, R. H. Lupton, M. Vargas Magaña, V. Malanushenko, E. Malanushenko, M. Manera, C. Maraston, D. Margala, C. K. McBride, J. Miralda-Escudé, A. D. Myers, R. C. Nichol, P. Noterdaeme, S. E. Nuza, M. D. Olmstead, D. Oravetz, I. Pâris, N. Padmanabhan, N. Palanque-Delabrouille, K. Pan, M. Pellejero-Ibanez, W. J. Percival, P. Petitjean, M. M. Pieri, F. Prada, B. Reid, N. A. Roe, A. J. Ross, N. P. Ross, G. Rossi, J. A. Rubiño-Martín, A. G. Sánchez, L. Samushia, R. Tanausú Génova Santos, C. G. Scóccola, D. J. Schlegel, D. P. Schneider, H.-J. Seo, E. Sheldon, A. Simmons, R. A. Skibba, A. Slosar, M. A. Strauss, D. Thomas, J. L. Tinker, R. Tojeiro, J. A. Vazquez, **Viel, M.**, D. A. Wake, B. A. Weaver, D. H. Weinberg, W. M. Wood-Vasey, C. Yèche, I. Zehavi, and G.-B. Zhao. Cosmological implications of baryon acoustic oscillation (BAO) measurements. *ArXiv e-prints*, November 2014.
- [2] Planck Collaboration, P. A. R. Ade, N. Aghanim, C. Armitage-Caplan, M. Arnaud, M. Ashdown, F. Atrio-Barandela, J. Aumont, C. Baccigalupi, A. J. Banday, and et al. Planck 2013 results. XIX. The integrated Sachs-Wolfe effect. *A&A*, 571:A19, November 2014.
- [3] Planck Collaboration, P. A. R. Ade, N. Aghanim, C. Armitage-Caplan, M. Arnaud, M. Ashdown, F. Atrio-Barandela, J. Aumont, C. Baccigalupi, A. J. Banday, and et al. Planck 2013 results. XII. Diffuse component separation. *A&A*, 571:A12, November 2014.
- [4] Planck Collaboration, P. A. R. Ade, N. Aghanim, M. I. R. Alves, C. Armitage-Caplan, M. Arnaud, M. Ashdown, F. Atrio-Barandela, J. Aumont, H. Aussel, and et al. Planck 2013 results. I. Overview of products and scientific results. *A&A*, 571:A1, November 2014.
- [5] F. Villaescusa-Navarro, **Viel, M.**, D. Alonso, K. K. Datta, P. Bull, and M. G. Santos. Cross-correlating 21cm intensity maps with Lyman Break Galaxies in the post-reionization era. *ArXiv e-prints*, October 2014.
- [6] N. Palanque-Delabrouille, C. Yèche, J. Lesgourgues, G. Rossi, A. Borde, **Viel, M.**, E. Aubourg, D. Kirkby, J.-M. LeGoff, J. Rich, N. Roe, N. P. Ross, D. P. Schneider, and D. Weinberg. Constraint on neutrino masses from SDSS-III/BOSS Ly $\alpha$  forest and other cosmological probes. *ArXiv e-prints*, October 2014.
- [7] E. Massara, F. Villaescusa-Navarro, and **Viel, M.** The halo model in a massive neutrino cosmology. *ArXiv e-prints*, October 2014.
- [8] F. Villaescusa-Navarro, **Viel, M.**, K. K. Datta, and T. R. Choudhury. Modeling the neutral hydrogen distribution in the post-reionization Universe: intensity mapping. *JCAP*, 9:50, September 2014.

- [9] A. Manzotti, M. Peloso, M. Pietroni, **Viel, M.**, and F. Villaescusa-Navarro. A coarse grained perturbation theory for the Large Scale Structure, with cosmology and time independence in the UV. *JCAP*, 9:47, September 2014.
- [10] U. Maio and **Viel, M.** The First Billion Years of a Warm Dark Matter Universe. *ArXiv e-prints*, September 2014.
- [11] V. Iršič and **Viel, M.** The Lyman-beta forest as a cosmic thermometer. *ArXiv e-prints*, September 2014.
- [12] F. Fontanot, F. Villaescusa-Navarro, D. Bianchi, and **Viel, M.** Semi-Analytic Galaxy Formation in Massive Neutrinos Cosmologies. *ArXiv e-prints*, September 2014.
- [13] D. Mégevand, F. M. Zerbi, P. Di Marcantonio, A. Cabral, M. Riva, M. Abreu, F. Pepe, S. Cristiani, R. Rebolo Lopez, N. C. Santos, H. Dekker, M. Aliverti, C. Allende, M. Amate, G. Avila, V. Baldini, T. Bandy, P. Bristow, C. Broeg, R. Cirami, J. Coelho, P. Conconi, I. Coretti, G. Cupani, V. D’Odorico, V. De Caprio, B. Delabre, R. Dorn, P. Figueira, A. Fragoso, S. Galeotta, L. Genolet, R. Gomes, J. González Hernández, I. Hughes, O. Iwert, F. Kerber, M. Landoni, J.-L. Lizon, C. Lovis, C. Maire, M. Mannelta, C. C. J. A. P. Martins, P. Molaro, M. A. S. Monteiro, M. Moschetti, A. Oliveira, M. R. Zapatero Osorio, E. Poretti, J. L. Rasilla, S. Santana Tschudi, P. Santos, D. Sosnowska, S. Sousa, F. Tenegi, G. Toso, E. Vanzella, and **Viel, M.** ESPRESSO: the radial velocity machine for the VLT. In *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, volume 9147 of *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, page 1, July 2014.
- [14] A. Borde, N. Palanque-Delabrouille, G. Rossi, **Viel, M.**, J. S. Bolton, C. Yèche, J.-M. LeGoff, and J. Rich. New approach for precise computation of Lyman- $\alpha$  forest power spectrum with hydrodynamical simulations. *JCAP*, 7:5, July 2014.
- [15] M. Costanzi, B. Sartoris, **Viel, M.**, and S. Borgani. Neutrino constraints: what large-scale structure and CMB data are telling us? *ArXiv e-prints*, July 2014.
- [16] G. Rossi, N. Palanque-Delabrouille, A. Borde, **Viel, M.**, C. Yèche, J. S. Bolton, J. Rich, and J.-M. Le Goff. Suite of hydrodynamical simulations for the Lyman- $\alpha$  forest with massive neutrinos. *A&A*, 567:A79, July 2014.
- [17] C. Di Porto, E. Branchini, J. Bel, F. Marulli, M. Bolzonella, O. Cucciati, S. de la Torre, B. R. Granett, L. Guzzo, C. Marinoni, L. Moscardini, U. Abbas, C. Adami, S. Arnouts, D. Bottini, A. Cappi, J. Coupon, I. Davidzon, G. De Lucia, A. Fritz, P. Franzetti, M. Fumana, B. Garilli, O. Ilbert, A. Iovino, J. Krywult, V. Le Brun, O. Le Fevre, D. Maccagni, K. Malek, H. J. McCracken, L. Paioro, M. Polletta, A. Pollo, M. Scodreggio, L. A. M. Tasca, R. Tojeiro, D. Vergani, A. Zanichelli, A. Burden, A. Marchetti, D. Martizzi, Y. Mellier, R. C. Nichol, J. A. Peacock, W. J. Percival, **Viel, M.**, M. Wolk, and G. Zamorani. The VIMOS Public Extragalactic Redshift Survey (VIPERS). Measuring nonlinear galaxy bias at  $z \sim 0.8$ . *ArXiv e-prints*, June 2014.

- [18] S. Eftekharzadeh, A. D. Myers, M. White, J. Bovy, X. Fan, J.-M. Le Goff, P. Laurent, C. McBride, J. Miralda-Escude, N. Palanque-Delabrouille, P. Petitjean, N. P. Ross, D. P. Schneider, Y. Shen, M. A. Strauss, A. Streblyanska, D. H. Weinberg, W. M. Wood-Vasey, **Viel, M.**, C. Yeche, D. York, and I. Zehavi. The Clustering of Quasars at Redshift 2.5 from the Final SDSS-III/BOSS Sample. In *American Astronomical Society Meeting Abstracts*, volume 224 of *American Astronomical Society Meeting Abstracts*, page 221.01, June 2014.
- [19] M. Baldi, F. Villaescusa-Navarro, **Viel, M.**, E. Puchwein, V. Springel, and L. Moscardini. Cosmic degeneracies - I. Joint N-body simulations of modified gravity and massive neutrinos. *MNRAS*, 440:75–88, May 2014.
- [20] A. Font-Ribera, D. Kirkby, N. Busca, J. Miralda-Escudé, N. P. Ross, A. Slosar, J. Rich, É. Aubourg, S. Bailey, V. Bhardwaj, J. Bautista, F. Beutler, D. Bizyaev, M. Blomqvist, H. Brewington, J. Brinkmann, J. R. Brownstein, B. Carithers, K. S. Dawson, T. Delubac, G. Ebelke, D. J. Eisenstein, J. Ge, K. Kinemuchi, K.-G. Lee, V. Malanushenko, E. Malanushenko, M. Marchante, D. Margala, D. Muna, A. D. Myers, P. Noterdaeme, D. Oravetz, N. Palanque-Delabrouille, I. Pâris, P. Petitjean, M. M. Pieri, G. Rossi, D. P. Schneider, A. Simmons, **Viel, M.**, C. Yeche, and D. G. York. Quasar-Lyman  $\alpha$  forest cross-correlation from BOSS DR11: Baryon Acoustic Oscillations. *JCAP*, 5:27, May 2014.
- [21] K.-G. Lee, J. P. Hennawi, D. N. Spergel, D. H. Weinberg, D. W. Hogg, **Viel, M.**, J. S. Bolton, S. Bailey, M. M. Pieri, W. Carithers, D. J. Schlegel, B. Lundgren, N. Palanque-Delabrouille, N. Suzuki, D. P. Schneider, and C. Yeche. IGM Constraints from the SDSS-III/BOSS DR9 Ly-alpha Forest Flux Probability Distribution Function. *ArXiv e-prints*, May 2014.
- [22] C. P. Ahn, R. Alexandroff, C. Allende Prieto, F. Anders, S. F. Anderson, T. Anderton, B. H. Andrews, É. Aubourg, S. Bailey, F. A. Bastien, and et al. The Tenth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-III Apache Point Observatory Galactic Evolution Experiment. *ApJS*, 211:17, April 2014.
- [23] E. Tescari, A. Katsianis, J. S. B. Wyithe, K. Dolag, L. Tornatore, P. Barai, **Viel, M.**, and S. Borgani. Simulated star formation rate functions at  $z \sim 4-7$ , and the role of feedback in high- $z$  galaxies. *MNRAS*, 438:3490–3506, March 2014.
- [24] J. S. Bolton, G. D. Becker, M. G. Haehnelt, and **Viel, M.** A consistent determination of the temperature of the intergalactic medium at redshift  $z = 2.4$ . *MNRAS*, 438:2499–2507, March 2014.
- [25] F. Villaescusa-Navarro, F. Marulli, **Viel, M.**, E. Branchini, E. Castorina, E. Sefusatti, and S. Saito. Cosmology with massive neutrinos I: towards a realistic modeling of the relation between matter, haloes and galaxies. *JCAP*, 3:11, March 2014.
- [26] I. Pâris, P. Petitjean, É. Aubourg, N. P. Ross, A. D. Myers, A. Streblyanska, S. Bailey, P. B. Hall, M. A. Strauss, S. F. Anderson, D. Bizyaev, A. Borde, J. Brinkmann, J. Bovy, W. N. Brandt, H. Brewington, J. R. Brownstein, B. A. Cook, G. Ebelke, X. Fan, N. Filiz Ak, H. Finley, A. Font-Ribera, J. Ge, F. Hamann, S. Ho, L. Jiang, K. Kinemuchi, E. Malanushenko, V. Malanushenko, M. Marchante, I. D. McGreer, R. G. McMahon, J. Miralda-Escudé,

- D. Muna, P. Noterdaeme, D. Oravetz, N. Palanque-Delabrouille, K. Pan, I. Perez-Fournon, M. Pieri, R. Riffel, D. J. Schlegel, D. P. Schneider, A. Simmons, **Viel, M.**, B. A. Weaver, W. M. Wood-Vasey, C. Yèche, and D. G. York. The Sloan Digital Sky Survey quasar catalog: tenth data release. *A&A*, 563:A54, March 2014.
- [27] C. Hernández-Monteagudo, A. J. Ross, A. Cuesta, R. Génova-Santos, J.-Q. Xia, F. Prada, G. Rossi, M. Neyrinck, **Viel, M.**, J.-A. Rubiño-Martin, C. G. Scóccola, G. Zhao, D. P. Schneider, J. R. Brownstein, D. Thomas, and J. V. Brinkmann. The SDSS-III Baryonic Oscillation Spectroscopic Survey: constraints on the integrated Sachs-Wolfe effect. *MNRAS*, 438:1724–1740, February 2014.
- [28] E. Castorina, E. Sefusatti, R. K. Sheth, F. Villaescusa-Navarro, and **Viel, M.** Cosmology with massive neutrinos II: on the universality of the halo mass function and bias. *JCAP*, 2:49, February 2014.
- [29] I. Paris, P. Petitjean, E. Aubourg, N. P. Ross, A. D. Myers, A. Strblyanska, S. Bailey, P. B. Hall, M. A. Strauss, S. F. Anderson, D. Bizyaev, A. Borde, J. Brinkmann, J. Bovy, W. N. Brandt, H. Brewington, J. R. Brownstein, B. A. Cook, G. Ebelke, X. Fan, A. N. Filiz, H. Finley, A. Font-Ribera, J. Ge, F. Hamann, S. Ho, L. Jiang, K. Kinemuchi, E. Malanushenko, V. Malanushenko, M. Marchante, I. D. McGreer, R. G. McMahon, J. Miralda-Escude, D. Muna, P. Noterdaeme, D. Oravetz, N. Palanque-Delabrouille, K. Pan, I. Perez-Fournon, M. Pieri, R. Riffel, D. J. Schlegel, D. P. Schneider, A. Simmons, **Viel, M.**, B. A. Weaver, W. M. Wood-Vasey, C. Yeche, and D. G. York. VizieR Online Data Catalog: SDSS quasar catalog: tenth data release (Paris+, 2014). *VizieR Online Data Catalog*, 7270:0, January 2014.
- [30] K. Markovič and **Viel, M.** Lyman- $\alpha$  Forest and Cosmic Weak Lensing in a Warm Dark Matter Universe. *PASA*, 31:6, January 2014.
- [31] P. Barai, **Viel, M.**, G. Murante, M. Gaspari, and S. Borgani. Kinetic or thermal AGN feedback in simulations of isolated and merging disc galaxies calibrated by the M- $\sigma$  relation. *MNRAS*, 437:1456–1475, January 2014.
- [32] F. Pepe, P. Molaro, S. Cristiani, R. Rebolo, N. C. Santos, H. Dekker, D. Mégevand, F. M. Zerbi, A. Cabral, P. Di Marcantonio, M. Abreu, M. Affolter, M. Aliverti, C. Allende Prieto, M. Amate, G. Avila, V. Baldini, P. Bristow, C. Broeg, R. Cirami, J. Coelho, P. Conconi, I. Coretti, G. Cupani, V. D’Odorico, V. De Caprio, B. Delabre, R. Dorn, P. Figueira, A. Frago, S. Galeotta, L. Genolet, R. Gomes, J. I. González Hernández, I. Hughes, O. Iwert, F. Kerber, M. Landoni, J.-L. Lizon, C. Lovis, C. Maire, M. Mannelta, C. Martins, M. Monteiro, A. Oliveira, E. Poretti, J. L. Rasilla, M. Riva, S. Santana Tschudi, P. Santos, D. Sosnowska, S. Sousa, P. Spanó, F. Tenegi, G. Toso, E. Vanzella, **Viel, M.**, and M. R. Zapatero Osorio. ESPRESSO: The next European exoplanet hunter. *ArXiv e-prints*, January 2014.
- [33] F. Pepe, P. Molaro, S. Cristiani, R. Rebolo, N. C. Santos, H. Dekker, D. Mégevand, F. M. Zerbi, A. Cabral, P. Di Marcantonio, M. Abreu, M. Affolter, M. Aliverti, C. Allende Prieto, M. Amate, G. Avila, V. Baldini, P. Bristow, C. Broeg, R. Cirami, J. Coelho, P. Conconi,

- I. Coretti, G. Cupani, V. D’Odorico, V. De Caprio, B. Delabre, R. Dorn, P. Figueira, A. Frago, S. Galeotta, L. Genolet, R. Gomes, J. I. González Hernández, I. Hughes, O. Iwert, F. Kerber, M. Landoni, J.-L. Lizon, C. Lovis, C. Maire, M. Mannelta, C. Martins, M. Monteiro, A. Oliveira, E. Poretti, J. L. Rasilla, M. Riva, S. Santana Tschudi, P. Santos, D. Sosnowska, S. Sousa, P. Spanó, F. Tenegi, G. Toso, E. Vanzella, **Viel, M.**, and M. R. Zapatero Osorio. ESPRESSO: The next European exoplanet hunter. *Astronomische Nachrichten*, 335:8, January 2014.
- [34] S. Ho, E. Aubourg, S. J. Bailey, J. Bautista, F. Beutler, D. Bizyaev, M. Blomqvist, A. S. Bolton, H. Brewington, J. V. Brinkmann, J. Brownstein, N. G. Busca, W. Carithers, R. A. Croft, K. S. Dawson, T. Delubac, G. Ebelke, D. Eisenstein, Y. Feng, A. Font-Ribera, D. W. Hogg, K. Kinemuchi, D. Kirkby, J. Le Goff, K. Lee, E. Malanushenko, V. Malanushenko, M. Marchante, D. Margela, J. Miralda-Escudé, D. Muna, A. D. Myers, R. Nichol, D. Oravetz, N. Palanque-Delabrouille, K. Pan, P. Noterdaeme, R. O’Connell, I. Paris, P. Petitjean, M. Pieri, E. Rollinde, N. Ross, G. Rossi, D. J. Schlegel, D. P. Schneider, A. Simmons, A. Slosar, **Viel, M.**, D. H. Weinberg, X. Xu, C. Yeche, and D. G. York. Baryon Acoustic Oscillations in Lyman Alpha Forest - Quasar Cross-Correlations. In *American Astronomical Society Meeting Abstracts*, volume 223 of *American Astronomical Society Meeting Abstracts*, page 457.10, January 2014.
- [35] D. J. Schlegel, T. Delubac, N. G. Busca, J. Rich, S. J. Bailey, J. Bautista, A. Front, D. Kirkby, J. Le Goff, M. Pieri, A. Slosar, E. Aubourg, M. Blomqvist, A. S. Bolton, A. Borde, W. Carithers, R. A. Croft, K. S. Dawson, D. Eisenstein, J. Hamilton, S. Ho, D. W. Hogg, K. Lee, B. Lundgren, D. Margala, J. Miralda-Escudé, A. D. Myers, P. Noterdaeme, N. Palanque-Delabrouille, I. Paris, P. Petitjean, N. Ross, G. Rossi, **Viel, M.**, D. H. Weinberg, M. White, C. Yeche, and Sloan Digital Sky Survey (SDSS-III) Baryon Oscillation Spectroscopic Survey (BOSS). Measurements of  $D_A$  and  $H$  at  $z=2.4$  from the SDSS-III/DR11 BOSS Lyman-alpha sample. In *American Astronomical Society Meeting Abstracts*, volume 223 of *American Astronomical Society Meeting Abstracts*, page 456.05, January 2014.
- [36] G. Rossi, N. Palanque-Delabrouille, C. Yeche, **Viel, M.**, J. Rich, J. LeGoff, and A. Borde. A Novel Suite of Hydrodynamical Simulations of the Lyman-Alpha Forest with Massive Neutrinos. In *American Astronomical Society Meeting Abstracts*, volume 223 of *American Astronomical Society Meeting Abstracts*, page 226.09, January 2014.
- [37] G.-B. Zhao, S. Saito, W. J. Percival, A. J. Ross, F. Montesano, **Viel, M.**, D. P. Schneider, M. Manera, J. Miralda-Escudé, N. Palanque-Delabrouille, N. P. Ross, L. Samushia, A. G. Sánchez, M. E. C. Swanson, D. Thomas, R. Tojeiro, C. Yèche, and D. G. York. The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: weighing the neutrino mass using the galaxy power spectrum of the CMASS sample. *MNRAS*, 436:2038–2053, December 2013.
- [38] M. Costanzi, F. Villaescusa-Navarro, **Viel, M.**, J.-Q. Xia, S. Borgani, E. Castorina, and E. Sefusatti. Cosmology with massive neutrinos III: the halo mass function and an application to galaxy clusters. *JCAP*, 12:12, December 2013.

- [39] N. Palanque-Delabrouille, C. Yèche, A. Borde, J.-M. Le Goff, G. Rossi, **Viel, M.**, É. Aubourg, S. Bailey, J. Bautista, M. Blomqvist, A. Bolton, J. S. Bolton, N. G. Busca, B. Carithers, R. A. C. Croft, K. S. Dawson, T. Delubac, A. Font-Ribera, S. Ho, D. Kirkby, K.-G. Lee, D. Margala, J. Miralda-Escudé, D. Muna, A. D. Myers, P. Noterdaeme, I. Pâris, P. Petitjean, M. M. Pieri, J. Rich, E. Rollinde, N. P. Ross, D. J. Schlegel, D. P. Schneider, A. Slosar, and D. H. Weinberg. The one-dimensional Ly $\alpha$  forest power spectrum from BOSS. *A&A*, 559:A85, November 2013.
- [40] V. D’Odorico, G. Cupani, S. Cristiani, R. Maiolino, P. Molaro, M. Nonino, M. Centurión, A. Cimatti, S. di Serego Alighieri, F. Fiore, A. Fontana, S. Gallerani, E. Giallongo, F. Mannucci, A. Marconi, L. Pentericci, **Viel, M.**, and G. Vladilo. Metals in the IGM approaching the re-ionization epoch: results from X-shooter at the VLT. *MNRAS*, 435:1198–1232, October 2013.
- [41] R. Maiolino, M. Haehnelt, M. T. Murphy, D. Queloz, L. Origlia, J. Alcalá, Y. Alibert, P. J. Amado, C. Allende Prieto, M. Ammler-von Eiff, M. Asplund, M. Barstow, G. Becker, X. Bonfils, F. Bouchy, A. Bragaglia, M. R. Burleigh, A. Chiavassa, D. A. Cimatti, M. Cirasuolo, S. Cristiani, V. D’Odorico, D. Dravins, E. Emsellem, J. Farihi, P. Figueira, J. Fynbo, B. T. Gansicke, M. Gillon, B. Gustafsson, V. Hill, G. Israelyan, A. Korn, S. Larsen, P. De Laverny, J. Liske, C. Lovis, A. Marconi, C. Martins, P. Molaro, B. Nisini, E. Oliva, P. Petitjean, M. Pettini, A. Recio Blanco, R. Rebolo, A. Reiners, C. Rodríguez-Lopez, N. Ryde, N. C. Santos, S. Savaglio, I. Snellen, K. Strassmeier, N. Tanvir, L. Testi, E. Tolstoy, A. Triaud, L. Vanzi, **Viel, M.**, and M. Volonteri. A Community Science Case for E-ELT HIRES. *ArXiv e-prints*, October 2013.
- [42] N. Palanque-Delabrouille, C. Yèche, A. Borde, J.-M. Le Goff, G. Rossi, **Viel, M.**, E. Aubourg, S. Bailey, J. Bautista, M. Blomqvist, A. Bolton, J. S. Bolton, N. G. Busca, B. Carithers, R. A. C. Croft, K. S. Dawson, T. Delubac, A. Font-Ribera, S. Ho, D. Kirkby, K.-G. Lee, D. Margala, J. Miralda-Escude, D. Muna, A. D. Myers, P. Noterdaeme, I. Paris, P. Petitjean, M. M. Pieri, J. Rich, E. Rollinde, N. P. Ross, D. J. Schlegel, D. P. Schneider, A. Slosar, and D. H. Weinberg. VizieR Online Data Catalog: 1D Ly $\alpha$  forest power spectrum (Palanque-Delabrouille+, 2013). *VizieR Online Data Catalog*, 355:99085, September 2013.
- [43] F. Pepe, S. Cristiani, R. Rebolo, N. C. Santos, H. Dekker, D. Mégevand, F. M. Zerbi, A. Cabral, P. Molaro, P. Di Marcantonio, M. Abreu, M. Affolter, M. Aliverti, C. Allende Prieto, M. Amate, G. Avila, V. Baldini, P. Bristow, C. Broeg, R. Cirami, J. Coelho, P. Conconi, I. Coretti, G. Cupani, V. D’Odorico, V. De Caprio, B. Delabre, R. Dorn, P. Figueira, A. Frago, S. Galeotta, L. Genolet, R. Gomes, J. I. González Hernández, I. Hughes, O. Iwert, F. Kerber, M. Landoni, J.-L. Lizon, C. Lovis, C. Maire, M. Mannelta, C. Martins, M. A. Monteiro, A. Oliveira, E. Poretti, J. L. Rasilla, M. Riva, S. Santana Tschudi, P. Santos, D. Sosnowska, S. Sousa, P. Spanò, F. Tenegi, G. Toso, E. Vanzella, **Viel, M.**, and M. R. Zapatero Osorio. ESPRESSO: An Echelle SPectrograph for Rocky Exoplanets Search and Stable Spectroscopic Observations. *The Messenger*, 153:6–16, September 2013.
- [44] **Viel, M.**, G. D. Becker, J. S. Bolton, and M. G. Haehnelt. Warm dark matter as a solution to the small scale crisis: New constraints from high redshift Lyman- $\alpha$  forest data. *PhRvD*, 88(4):043502, August 2013.

- [45] **Viel, M.** New Results on the Coldness of Cold Dark Matter. In *Tracing Cosmic Evolution with Clusters of Galaxies, a conference held 1-5 July, 2013 in Sexten, Italy*. Online at <http://www.sexten-cfa.eu/en/conferences/2013/details/34-SestoClusters2013.html>, year = 2013, month = jul, eid = 9, pages = 9, adsurl = <http://adsabs.harvard.edu/abs/2013tcec.confE...9V>, adsnote = Provided by the SAO/NASA Astrophysics Data System.
- [46] L. Iapichino, **Viel, M.**, and S. Borgani. Turbulence driven by structure formation in the circumgalactic medium. *MNRAS*, 432:2529–2540, July 2013.
- [47] F. Villaescusa-Navarro, M. Vogelsberger, **Viel, M.**, and A. Loeb. Neutrino signatures on the high-transmission regions of the Lyman  $\alpha$  forest. *MNRAS*, 431:3670–3677, June 2013.
- [48] M. Costanzi Alunno Cerbolini, B. Sartoris, J.-Q. Xia, A. Biviano, S. Borgani, and **Viel, M.** Constraining neutrino properties with a Euclid-like galaxy cluster survey. *JCAP*, 6:20, June 2013.
- [49] P. Barai, **Viel, M.**, S. Borgani, E. Tescari, L. Tornatore, K. Dolag, M. Killevar, P. Monaco, V. D’Odorico, and S. Cristiani. Galactic winds in cosmological simulations of the circumgalactic medium. *MNRAS*, 430:3213–3234, April 2013.
- [50] A. Slosar, V. Iršič, D. Kirkby, S. Bailey, N. G. Busca, T. Delubac, J. Rich, É. Aubourg, J. E. Bautista, V. Bhardwaj, M. Blomqvist, A. S. Bolton, J. Bovy, J. Brownstein, B. Carithers, R. A. C. Croft, K. S. Dawson, A. Font-Ribera, J.-M. Le Goff, S. Ho, K. Honscheid, K.-G. Lee, D. Margala, P. McDonald, B. Medolin, J. Miralda-Escudé, A. D. Myers, R. C. Nichol, P. Noterdaeme, N. Palanque-Delabrouille, I. Pâris, P. Petitjean, M. M. Pieri, Y. Piškur, N. A. Roe, N. P. Ross, G. Rossi, D. J. Schlegel, D. P. Schneider, N. Suzuki, E. S. Sheldon, U. Seljak, **Viel, M.**, D. H. Weinberg, and C. Yèche. Measurement of baryon acoustic oscillations in the Lyman- $\alpha$  forest fluctuations in BOSS data release 9. *JCAP*, 4:26, April 2013.
- [51] N. G. Busca, T. Delubac, J. Rich, S. Bailey, A. Font-Ribera, D. Kirkby, J.-M. Le Goff, M. M. Pieri, A. Slosar, É. Aubourg, J. E. Bautista, D. Bizyaev, M. Blomqvist, A. S. Bolton, J. Bovy, H. Brewington, A. Borde, J. Brinkmann, B. Carithers, R. A. C. Croft, K. S. Dawson, G. Ebelke, D. J. Eisenstein, J.-C. Hamilton, S. Ho, D. W. Hogg, K. Honscheid, K.-G. Lee, B. Lundgren, E. Malanushenko, V. Malanushenko, D. Margala, C. Maraston, K. Mehta, J. Miralda-Escudé, A. D. Myers, R. C. Nichol, P. Noterdaeme, M. D. Olmstead, D. Oravetz, N. Palanque-Delabrouille, K. Pan, I. Pâris, W. J. Percival, P. Petitjean, N. A. Roe, E. Rollinde, N. P. Ross, G. Rossi, D. J. Schlegel, D. P. Schneider, A. Sheldon, E. S. Sheldon, A. Simmons, S. Snedden, J. L. Tinker, **Viel, M.**, B. A. Weaver, D. H. Weinberg, M. White, C. Yèche, and D. G. York. Baryon acoustic oscillations in the Ly $\alpha$  forest of BOSS quasars. *A&A*, 552:A96, April 2013.
- [52] D. Kirkby, D. Margala, A. Slosar, S. Bailey, N. G. Busca, T. Delubac, J. Rich, J. E. Bautista, M. Blomqvist, J. R. Brownstein, B. Carithers, R. A. C. Croft, K. S. Dawson, A. Font-Ribera, J. Miralda-Escudé, A. D. Myers, R. C. Nichol, N. Palanque-Delabrouille, I. Pâris, P. Petitjean, G. Rossi, D. J. Schlegel, D. P. Schneider, **Viel, M.**, D. H. Weinberg,

and C. Yèche. Fitting methods for baryon acoustic oscillations in the Lyman- $\alpha$  forest fluctuations in BOSS data release 9. *JCAP*, 3:24, March 2013.

- [53] F. Villaescusa-Navarro, S. Bird, C. Peña-Garay, and **Viel, M.** Non-linear evolution of the cosmic neutrino background. *JCAP*, 3:19, March 2013.
- [54] K.-G. Lee, S. Bailey, L. E. Bartsch, W. Carithers, K. S. Dawson, D. Kirkby, B. Lundgren, D. Margala, N. Palanque-Delabrouille, M. M. Pieri, D. J. Schlegel, D. H. Weinberg, C. Yèche, É. Aubourg, J. Bautista, D. Bizyaev, M. Blomqvist, A. S. Bolton, A. Borde, H. Brewington, N. G. Busca, R. A. C. Croft, T. Delubac, G. Ebelke, D. J. Eisenstein, A. Font-Ribera, J. Ge, J.-C. Hamilton, J. F. Hennawi, S. Ho, K. Honscheid, J.-M. Le Goff, E. Malanushenko, V. Malanushenko, J. Miralda-Escudé, A. D. Myers, P. Noterdaeme, D. Oravetz, K. Pan, I. Pâris, P. Petitjean, J. Rich, E. Rollinde, N. P. Ross, G. Rossi, D. P. Schneider, A. Simmons, S. Snedden, A. Slosar, D. N. Spergel, N. Suzuki, **Viel, M.**, and B. A. Weaver. The BOSS Ly $\alpha$  Forest Sample from SDSS Data Release 9. *AJ*, 145:69, March 2013.
- [55] **Viel, M.**, J. Schaye, and C. M. Booth. The impact of feedback from galaxy formation on the Lyman  $\alpha$  transmitted flux. *MNRAS*, 429:1734–1746, February 2013.
- [56] V. Vitagliano, J.-Q. Xia, S. Liberati, and **Viel, M.** High-z cosmography at a glance. *ArXiv e-prints*, February 2013.
- [57] B. Audren, J. Lesgourgues, S. Bird, M. G. Haehnelt, and **Viel, M.** Neutrino masses and cosmological parameters from a Euclid-like survey: Markov Chain Monte Carlo forecasts including theoretical errors. *JCAP*, 1:26, January 2013.
- [58] K. S. Dawson, D. J. Schlegel, C. P. Ahn, S. F. Anderson, É. Aubourg, S. Bailey, R. H. Barkhouser, J. E. Bautista, A. Beifiori, A. A. Berlind, V. Bhardwaj, D. Bizyaev, C. H. Blake, M. R. Blanton, M. Blomqvist, A. S. Bolton, A. Borde, J. Bovy, W. N. Brandt, H. Brewington, J. Brinkmann, P. J. Brown, J. R. Brownstein, K. Bundy, N. G. Busca, W. Carithers, A. R. Carnero, M. A. Carr, Y. Chen, J. Comparat, N. Connolly, F. Cope, R. A. C. Croft, A. J. Cuesta, L. N. da Costa, J. R. A. Davenport, T. Delubac, R. de Putter, S. Dhital, A. Ealet, G. L. Ebelke, D. J. Eisenstein, S. Escoffier, X. Fan, N. Filiz Ak, H. Finley, A. Font-Ribera, R. Génova-Santos, J. E. Gunn, H. Guo, D. Haggard, P. B. Hall, J.-C. Hamilton, B. Harris, D. W. Harris, S. Ho, D. W. Hogg, D. Holder, K. Honscheid, J. Huehnerhoff, B. Jordan, W. P. Jordan, G. Kauffmann, E. A. Kazin, D. Kirkby, M. A. Klaene, J.-P. Kneib, J.-M. Le Goff, K.-G. Lee, D. C. Long, C. P. Loomis, B. Lundgren, R. H. Lupton, M. A. G. Maia, M. Makler, E. Malanushenko, V. Malanushenko, R. Mandelbaum, M. Manera, C. Maraston, D. Margala, K. L. Masters, C. K. McBride, P. McDonald, I. D. McGreer, R. G. McMahon, O. Mena, J. Miralda-Escudé, A. D. Montero-Dorta, F. Montesano, D. Muna, A. D. Myers, T. Naugle, R. C. Nichol, P. Noterdaeme, S. E. Nuza, M. D. Olmstead, A. Oravetz, D. J. Oravetz, R. Owen, N. Padmanabhan, N. Palanque-Delabrouille, K. Pan, J. K. Parejko, I. Pâris, W. J. Percival, I. Pérez-Fournon, I. Pérez-Ràfols, P. Petitjean, R. Pfaffenberger, J. Pforr, M. M. Pieri, F. Prada, A. M. Price-Whelan, M. J. Raddick, R. Rebolo, J. Rich, G. T. Richards, C. M. Rockosi, N. A. Roe, A. J. Ross, N. P. Ross, G. Rossi, J. A. Rubiño-Martin, L. Samushia, A. G. Sánchez, C. Sayres, S. J. Schmidt, D. P. Schneider, C. G. Scóccola, H.-J. Seo, A. Shelden, E. Sheldon, Y. Shen, Y. Shu, A. Slosar,



- S. A. Smee, S. A. Snedden, F. Stauffer, O. Steele, M. A. Strauss, A. Streblyanska, N. Suzuki, M. E. C. Swanson, T. Tal, M. Tanaka, D. Thomas, J. L. Tinker, R. Tojeiro, C. A. Tremonti, M. Vargas Magaña, L. Verde, **Viel, M.**, D. A. Wake, M. Watson, B. A. Weaver, D. H. Weinberg, B. J. Weiner, A. A. West, M. White, W. M. Wood-Vasey, C. Yeche, I. Zehavi, G.-B. Zhao, and Z. Zheng. The Baryon Oscillation Spectroscopic Survey of SDSS-III. *AJ*, 145:10, January 2013.
- [59] A. Borde, C. Yeche, N. Palanque-Delabrouille, R. A. Croft, A. Font, J. LeGoff, P. McDonald, J. Miralda, A. D. Myers, P. Petitjean, M. Pieri, A. Slosar, **Viel, M.**, D. H. Weinberg, D. G. York, and G. Rossi. Measurement of the 1D Lyman-alpha Power Spectrum with the DR9 BOSS Quasar Data. In *American Astronomical Society Meeting Abstracts*, volume 221 of *American Astronomical Society Meeting Abstracts*, page 402.02, January 2013.
- [60] G. Rossi, N. Palanque-Delabrouille, C. Yeche, A. Borde, J. Rich, **Viel, M.**, and J. Lesgourgues. Neutrino Masses, Cosmological Parameters and Dark Energy from the Transmitted Flux in the Lyman-alpha Forest. In *American Astronomical Society Meeting Abstracts*, volume 221 of *American Astronomical Society Meeting Abstracts*, page 323.04, January 2013.
- [61] K.-G. Lee, J. Hennawi, D. N. Spergel, D. W. Hogg, **Viel, M.**, M. Pieri, J. Bolton, S. J. Bailey, J. Ge, D. J. Schlegel, N. Suzuki, and BOSS Collaboration. Constraints on the IGM Temperature-Density Relationship from BOSS Lyman- $\alpha$  Forest Data. In *American Astronomical Society Meeting Abstracts*, volume 221 of *American Astronomical Society Meeting Abstracts*, page 245.03, January 2013.
- [62] D. Munshi, P. Coles, and **Viel, M.** Statistics of cosmological Lyman  $\alpha$  absorption. *MNRAS*, 427:2359–2375, December 2012.
- [63] C. P. Ahn, R. Alexandroff, C. Allende Prieto, S. F. Anderson, T. Anderton, B. H. Andrews, É. Aubourg, S. Bailey, E. Balbinot, R. Barnes, and et al. The Ninth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-III Baryon Oscillation Spectroscopic Survey. *ApJS*, 203:21, December 2012.
- [64] S. Ho, A. Cuesta, H.-J. Seo, R. de Putter, A. J. Ross, M. White, N. Padmanabhan, S. Saito, D. J. Schlegel, E. Schlafly, U. Seljak, C. Hernández-Montenegro, A. G. Sánchez, W. J. Percival, M. Blanton, R. Skibba, D. Schneider, B. Reid, O. Mena, **Viel, M.**, D. J. Eisenstein, F. Prada, B. A. Weaver, N. Bahcall, D. Bizyaev, H. Brewington, J. Brinkman, L. Nicolaci da Costa, J. R. Gott, E. Malanushenko, V. Malanushenko, B. Nichol, D. Oravetz, K. Pan, N. Palanque-Delabrouille, N. P. Ross, A. Simmons, F. de Simoni, S. Snedden, and C. Yeche. Clustering of Sloan Digital Sky Survey III Photometric Luminous Galaxies: The Measurement, Systematics, and Cosmological Implications. *ApJ*, 761:14, December 2012.
- [65] I. Pâris, P. Petitjean, É. Aubourg, S. Bailey, N. P. Ross, A. D. Myers, M. A. Strauss, S. F. Anderson, E. Arnau, J. Bautista, D. Bizyaev, A. S. Bolton, J. Bovy, W. N. Brandt, H. Brewington, J. R. Browstein, N. Busca, D. Capellupo, W. Carithers, R. A. C. Croft, K. Dawson, T. Delubac, G. Ebelke, D. J. Eisenstein, P. Engelke, X. Fan, N. Filiz Ak, H. Finley, A. Font-Ribera, J. Ge, R. R. Gibson, P. B. Hall, F. Hamann, J. F. Hennawi, S. Ho, D. W. Hogg, Ž. Ivezić, L. Jiang, A. E. Kimball, D. Kirkby, J. A. Kirkpatrick, K.-G. Lee, J.-M. Le Goff, B. Lundgren, C. L. MacLeod, E. Malanushenko, V. Malanushenko,

C. Maraston, I. D. McGreer, R. G. McMahon, J. Miralda-Escudé, D. Muna, P. Noterdaeme, D. Oravetz, N. Palanque-Delabrouille, K. Pan, I. Perez-Fournon, M. M. Pieri, G. T. Richards, E. Rollinde, E. S. Sheldon, D. J. Schlegel, D. P. Schneider, A. Slosar, A. Shelden, Y. Shen, A. Simmons, S. Snedden, N. Suzuki, J. Tinker, **Viel, M.**, B. A. Weaver, D. H. Weinberg, M. White, W. M. Wood-Vasey, and C. Yèche. The Sloan Digital Sky Survey quasar catalog: ninth data release. *A&A*, 548:A66, December 2012.

- [66] I. Paris, P. Petitjean, E. Aubourg, S. Bailey, N. P. Ross, A. D. Myers, M. A. Strauss, S. F. Anderson, E. Arnau, J. Bautista, D. Bizyaev, A. S. Bolton, J. Bovy, W. N. Brandt, H. Brewington, J. R. Brownstein, N. Busca, D. Capellupo, W. Carithers, R. A. C. Croft, K. Dawson, T. Delubac, G. Ebelke, D. J. Eisenstein, P. Engelke, X. Fan, A. N. Filiz, H. Finley, A. Font-Ribera, J. Ge, R. R. Gibson, P. B. Hall, F. Hamann, J. F. Hennawi, S. Ho, D. W. Hogg, Z. Ivezić, L. Jiang, A. E. Kimball, D. Kirky, J. A. Kirkpatrick, K.-G. Lee, J.-M. Le Goff, B. Lundgren, C. L. MacLeod, E. Malanushenko, V. Malanushenko, C. Maraston, I. D. McGreer, R. G. McMahon, J. Miralda-Escude, D. Muna, P. Noterdaeme, D. Oravetz, N. Palanque-Delabrouille, K. Pan, I. Perez-Fournon, M. M. Pieri, G. T. Richards, E. Rollinde, E. S. Sheldon, D. J. Schlegel, D. P. Schneider, A. Slosar, A. Shelden, Y. Shen, A. Simmons, S. Snedden, N. Suzuki, J. Tinker, **Viel, M.**, B. A. Weaver, D. W. Weinberg, M. White, W. M. Wood-Vasey, and C. Yèche. VizieR Online Data Catalog: SDSS Quasar Catalog, DR9Q (Paris+, 2012). *VizieR Online Data Catalog*, 7269:0, October 2012.
- [67] I. Paris, P. Petitjean, E. Aubourg, S. Bailey, N. P. Ross, A. D. Myers, M. A. Strauss, S. F. Anderson, E. Arnau, J. Bautista, D. Bizyaev, A. S. Bolton, J. Bovy, W. N. Brandt, H. Brewington, J. R. Brownstein, N. Busca, D. Capellupo, W. Carithers, R. A. C. Croft, K. Dawson, T. Delubac, G. Ebelke, D. J. Eisenstein, P. Engelke, X. Fan, A. N. Filiz, H. Finley, A. Font-Ribera, J. Ge, R. R. Gibson, P. B. Hall, F. Hamann, J. F. Hennawi, S. Ho, D. W. Hogg, Z. Ivezić, L. Jiang, A. E. Kimball, D. Kirky, J. A. Kirkpatrick, K.-G. Lee, J.-M. Le Goff, B. Lundgren, C. L. MacLeod, E. Malanushenko, V. Malanushenko, C. Maraston, I. D. McGreer, R. G. McMahon, J. Miralda-Escude, D. Muna, P. Noterdaeme, D. Oravetz, N. Palanque-Delabrouille, K. Pan, I. Perez-Fournon, M. M. Pieri, G. T. Richards, E. Rollinde, E. S. Sheldon, D. J. Schlegel, D. P. Schneider, A. Slosar, A. Shelden, Y. Shen, A. Simmons, S. Snedden, N. Suzuki, J. Tinker, **Viel, M.**, B. A. Weaver, D. W. Weinberg, M. White, W. M. Wood-Vasey, and C. Yèche. VizieR Online Data Catalog: SDSS Quasar Catalog, DR9Q (Paris+, 2012). *VizieR Online Data Catalog*, 354:89066, October 2012.
- [68] J.-W. den Herder, L. Piro, T. Ohashi, C. Kouveliotou, D. H. Hartmann, J. S. Kaastra, L. Amati, M. I. Andersen, M. Arnaud, J.-L. Attéia, S. Bandler, M. Barbera, X. Barcons, S. Barthelmy, S. Basa, S. Basso, M. Boer, E. Branchini, G. Branduardi-Raymont, S. Borgani, A. Boyarsky, G. Brunetti, C. Budtz-Jorgensen, D. Burrows, N. Butler, S. Campana, E. Caroli, M. Ceballos, F. Christensen, E. Churazov, A. Comastri, L. Colasanti, R. Cole, R. Content, A. Corsi, E. Costantini, P. Conconi, G. Cusumano, J. de Plaa, A. De Rosa, M. Del Santo, S. Di Cosimo, M. De Pasquale, R. Doriese, S. Etti, P. Evans, Y. Ezoe, L. Ferrari, H. Finger, T. Figueroa-Feliciano, P. Friedrich, R. Fujimoto, A. Furuzawa, J. Fynbo, F. Gatti, M. Galeazzi, N. Gehrels, B. Gendre, G. Ghirlanda, G. Ghisellini, M. Gilfanov, P. Giommi, M. Girardi, J. Grindlay, M. Cocchi, O. Godet, M. Guedel, F. Haardt, R. den

Hartog, I. Hepburn, W. Hermsen, J. Hjorth, H. Hoekstra, A. Holland, A. Hornstrup, A. van der Horst, A. Hoshino, J. in't Zand, K. Irwin, Y. Ishisaki, P. Jonker, T. Kitayama, H. Kawahara, N. Kawai, R. Kelley, C. Kilbourne, P. de Korte, A. Kusenko, I. Kuvvetli, M. Labanti, C. Macculi, R. Maiolino, M. M. Hesse, K. Matsushita, P. Mazzotta, D. McCammon, M. Méndez, R. Mignani, T. Mineo, K. Mitsuda, R. Mushotzky, S. Molendi, L. Moscardini, L. Natalucci, F. Nicastro, P. O'Brien, J. Osborne, F. Paerels, M. Page, S. Paltani, K. Pedersen, E. Perinati, T. Ponman, E. Pointecouteau, P. Predehl, S. Porter, A. Rasmussen, G. Rauw, H. Röttgering, M. Roncarelli, P. Rosati, E. Quadrini, O. Ruchayskiy, R. Salvaterra, S. Sasaki, K. Sato, S. Savaglio, J. Schaye, S. Sciortino, M. Shaposhnikov, R. Sharples, K. Shinozaki, D. Spiga, R. Sunyaev, Y. Suto, Y. Takei, N. Tanvir, M. Tashiro, T. Tamura, Y. Tawara, E. Troja, M. Tsujimoto, T. Tsuru, P. Ubertini, J. Ullom, E. Ursino, F. Verbunt, F. van de Voort, **Viel, M.**, S. Wachter, D. Watson, M. Weisskopf, N. Werner, N. White, R. Willingale, R. Wijers, N. Yamasaki, K. Yoshikawa, and S. Zane. ORIGIN: metal creation and evolution from the cosmic dawn. *Experimental Astronomy*, 34:519–549, October 2012.

- [69] D. Mégevand, F. M. Zerbi, A. Cabral, P. Di Marcantonio, M. Amate, F. Pepe, S. Cristiani, R. Rebolo, N. C. Santos, H. Dekker, M. Abreu, M. Affolter, G. Avila, V. Baldini, P. Bristow, C. Broeg, P. Carvas, R. Cirami, J. Coelho, M. Comari, P. Conconi, I. Coretti, G. Cupani, V. D'Odorico, V. De Caprio, B. Delabre, P. Figueira, M. Fleury, A. Fragoso, L. Genolet, R. Gomes, J. Gonzalez Hernandez, I. Hughes, O. Iwert, F. Kerber, M. Landoni, J. Lima, J.-L. Lizon, C. Lovis, C. Maire, M. Mannelta, C. Martins, A. Moitinho, P. Molaro, M. Monteiro, J. L. Rasilla, M. Riva, S. Santana Tschudi, P. Santin, D. Sosnowska, S. Sousa, P. Spanò, F. Tenegi, G. Toso, E. Vanzella, **Viel, M.**, and M. R. Zapatero Osorio. ESPRESSO: the ultimate rocky exoplanets hunter for the VLT. In *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, volume 8446 of *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, page 1, September 2012.
- [70] A. Garzilli, J. S. Bolton, T.-S. Kim, S. Leach, and **Viel, M.** The intergalactic medium thermal history at redshift  $z = 1.7-3.2$  from the Ly $\alpha$  forest: a comparison of measurements using wavelets and the flux distribution. *MNRAS*, 424:1723–1736, August 2012.
- [71] M. White, A. D. Myers, N. P. Ross, D. J. Schlegel, J. F. Hennawi, Y. Shen, I. McGreer, M. A. Strauss, A. S. Bolton, J. Bovy, X. Fan, J. Miralda-Escude, N. Palanque-Delabrouille, I. Paris, P. Petitjean, D. P. Schneider, **Viel, M.**, D. H. Weinberg, C. Yeche, I. Zehavi, K. Pan, S. Snedden, D. Bizyaev, H. Brewington, J. Brinkmann, V. Malanushenko, E. Malanushenko, D. Oravetz, A. Simmons, A. Sheldon, and B. A. Weaver. The clustering of intermediate-redshift quasars as measured by the Baryon Oscillation Spectroscopic Survey. *MNRAS*, 424:933–950, August 2012.
- [72] F. Calura, E. Tescari, V. D'Odorico, **Viel, M.**, S. Cristiani, T.-S. Kim, and J. S. Bolton. The Lyman  $\alpha$  forest flux probability distribution at  $z > 3$ . *MNRAS*, 422:3019–3036, June 2012.
- [73] J.-Q. Xia, B. R. Granett, **Viel, M.**, S. Bird, L. Guzzo, M. G. Haehnelt, J. Coupon, H. J. McCracken, and Y. Mellier. Constraints on massive neutrinos from the CFHTLS angular power spectrum. *JCAP*, 6:10, June 2012.

- [74] J.-Q. Xia, M. Negrello, A. Lapi, G. De Zotti, L. Danese, and **Viel, M.** Clustering of submillimetre galaxies in a self-regulated baryon collapse model. *MNRAS*, 422:1324–1331, May 2012.
- [75] **Viel, M.**, K. Markovič, M. Baldi, and J. Weller. The non-linear matter power spectrum in warm dark matter cosmologies. *MNRAS*, 421:50–62, March 2012.
- [76] S. Bird, **Viel, M.**, and M. G. Haehnelt. Massive neutrinos and the non-linear matter power spectrum. *MNRAS*, 420:2551–2561, March 2012.
- [77] J.-Q. Xia, V. Vitagliano, S. Liberati, and **Viel, M.** Cosmography beyond standard candles and rulers. *PhRvD*, 85(4):043520, February 2012.
- [78] M. Pietroni, G. Mangano, N. Saviano, and **Viel, M.** Coarse-grained cosmological perturbation theory. *JCAP*, 1:19, January 2012.
- [79] A. J. Cuesta-Vazquez, S. Ho, H. Seo, M. White, A. J. Ross, S. Saito, B. A. Reid, N. Padmanabhan, W. J. Percival, R. de Putter, D. J. Schlegel, D. J. Eisenstein, F. Prada, L. A. N. da Costa, F. de Simoni, R. A. Skibba, L. Verde, and **Viel, M.** Cosmological Constraints from the Angular Power Spectra of SDSS DR8 Photometric LRGs. In *American Astronomical Society Meeting Abstracts*, volume 219 of *American Astronomical Society Meeting Abstracts*, page 342.04, January 2012.
- [80] R. A. Croft, E. Arnau, E. Aubourg, S. Bailey, J. Bechtold, V. Bhardwaj, A. Bolton, A. Borde, J. Brinkmann, N. Busca, W. Carithers, R. Cen, R. Charlassier, M. Cortes, A. Dall’Aglio, S. Cristiani, K. Dawson, T. Delubac, A. Font-Ribera, J. Hamilton, S. Ho, K. Lee, J. LeGoff, D. Kirkby, B. Lundgren, B. Menard, J. Miralda-Escude, N. Palanque-Delabrouille, A. Myers, I. Paris, S. Peirani, P. Petitjean, M. Pieri, J. Rich, E. Rollinde, N. Ross, D. Schlegel, R. Skibba, A. Slosar, N. Suzuki, H. Trac, S. Vikas, **Viel, M.**, D. Wake, D. Weinberg, M. White, and C. Yeche. Dense Sampling and Large Volume: The Structure of the Intergalactic Medium from 50,000 SDSS3 BOSS Quasar Absorption Spectra. In *American Astronomical Society Meeting Abstracts*, volume 219 of *American Astronomical Society Meeting Abstracts*, page 324.03, January 2012.
- [81] F. Marulli, C. Carbone, **Viel, M.**, L. Moscardini, and A. Cimatti. Effects of massive neutrinos on the large-scale structure of the Universe. *MNRAS*, 418:346–356, November 2011.
- [82] J.-Q. Xia, A. Cuoco, E. Branchini, M. Fornasa, and **Viel, M.** A cross-correlation study of the Fermi-LAT  $\gamma$ -ray diffuse extragalactic signal. *MNRAS*, 416:2247–2264, September 2011.
- [83] L. A. Barnes, M. G. Haehnelt, E. Tescari, and **Viel, M.** Galactic winds and extended Ly $\alpha$  emission from the host galaxies of high column density quasi-stellar object absorption systems. *MNRAS*, 416:1723–1738, September 2011.
- [84] J.-Q. Xia, C. Baccigalupi, S. Matarrese, L. Verde, and **Viel, M.** Constraints on primordial non-Gaussianity from large scale structure probes. *JCAP*, 8:33, August 2011.

- [85] M. Haehnelt, L. Barnes, M. Rauch, G. Becker, W. Sargent, E. Tescari, and **Viel, M.** Probing galactic winds from DLA/LLS host galaxies with spatially extended Lyman-alpha emission. In *Galaxy Formation*, page 77, July 2011.
- [86] A. Vallinotto, **Viel, M.**, S. Das, and D. N. Spergel. Cross-correlations of the Ly $\alpha$  Forest with Weak-lensing Convergence. Analytical Estimates of Signal-to-noise Ratio and Implications for Neutrino Mass and Dark Energy. *ApJ*, 735:38, July 2011.
- [87] J. S. Bolton and **Viel, M.** The impact of spatial fluctuations in the ultraviolet background on intergalactic carbon and silicon. *MNRAS*, 414:241–252, June 2011.
- [88] F. Villaescusa-Navarro, M. Vogelsberger, **Viel, M.**, and A. Loeb. Neutrino Signatures on the High Transmission Regions of the Lyman-alpha Forest. *ArXiv e-prints*, June 2011.
- [89] Y. Takei, E. Ursino, E. Branchini, T. Ohashi, H. Kawahara, K. Mitsuda, L. Piro, A. Corsi, L. Amati, J. W. den Herder, M. Galeazzi, J. Kaastra, L. Moscardini, F. Nicastro, F. Paerels, M. Roncarelli, and **Viel, M.** Studying the Warm-hot Intergalactic Medium in Emission. *ApJ*, 734:91, June 2011.
- [90] S. Bird, H. V. Peiris, **Viel, M.**, and L. Verde. Minimally parametric power spectrum reconstruction from the Lyman  $\alpha$  forest. *MNRAS*, 413:1717–1728, May 2011.
- [91] G. Cupani, V. D’Odorico, S. Cristiani, **Viel, M.**, and E. Vanzella. X-shooter observations of QSO pairs. *Astronomische Nachrichten*, 332:319–320, March 2011.
- [92] V. D’Odorico, G. Cupani, S. Cristiani, R. Maiolino, P. Molaro, M. Nonino, A. Cimatti, S. di Serego Alighieri, F. Fiore, A. Fontana, S. Gallerani, E. Giallongo, F. Mannucci, A. Marconi, L. Pentericci, **Viel, M.**, and G. Vladilo. Optical-NIR spectra of quasars close to reionization ( $z \sim 6$ ). *Astronomische Nachrichten*, 332:315, March 2011.
- [93] E. Tescari, **Viel, M.**, V. D’Odorico, S. Cristiani, F. Calura, S. Borgani, and L. Tornatore. Cosmic evolution of the C IV in high-resolution hydrodynamic simulations. *MNRAS*, 411:826–848, February 2011.
- [94] M. Baldi and **Viel, M.** The impact of coupled dark energy cosmologies on the high-redshift intergalactic medium. *MNRAS*, 409:L89–L93, November 2010.
- [95] M. Cappetta, V. D’Odorico, S. Cristiani, F. Saitta, and **Viel, M.** High-resolution spectroscopy of the 3D cosmic web with close QSO groups. *MNRAS*, 407:1290–1300, September 2010.
- [96] J.-Q. Xia, A. Bonaldi, C. Baccigalupi, G. De Zotti, S. Matarrese, L. Verde, and **Viel, M.** Constraining primordial non-Gaussianity with high-redshift probes. *JCAP*, 8:13, August 2010.
- [97] L. Pasquini, S. Cristiani, R. García López, M. Haehnelt, M. Mayor, J. Liske, A. Manescau, G. Avila, H. Dekker, O. Iwert, B. Delabre, G. Lo Curto, V. D’Odorico, P. Molaro, **Viel, M.**, E. Vanzella, P. Bonifacio, P. Di Marcantonio, P. Santin, M. Comari, R. Cirami, I. Coretti, F. M. Zerbi, P. Spanò, M. Riva, R. Rebolo, G. Israelian, A. Herrero, M. R. Zapatero Osorio,

- F. Tenegi, B. Carswell, G. Becker, S. Udry, F. Pepe, C. Lovis, D. Naef, M. Dessauges, and D. Mégevand. Codex. In *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, volume 7735 of *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, page 2, July 2010.
- [98] F. A. Pepe, S. Cristiani, R. Rebolo Lopez, N. C. Santos, A. Amorim, G. Avila, W. Benz, P. Bonifacio, A. Cabral, P. Carvas, R. Cirami, J. Coelho, M. Comari, I. Coretti, V. De Caprio, H. Dekker, B. Delabre, P. Di Marcantonio, V. D’Odorico, M. Fleury, R. García, J. M. Herreros Linares, I. Hughes, O. Iwert, J. Lima, J.-L. Lizon, G. Lo Curto, C. Lovis, A. Manescau, C. Martins, D. Mégevand, A. Moitinho, P. Molaro, M. Monteiro, M. Monteiro, L. Pasquini, C. Mordasini, D. Queloz, J. L. Rasilla, J. M. Rebordão, S. Santana Tschudi, P. Santin, D. Sosnowska, P. Spanò, F. Tenegi, S. Udry, E. Vanzella, **Viel, M.**, M. R. Zapatero Osorio, and F. Zerbi. ESPRESSO: the Echelle spectrograph for rocky exoplanets and stable spectroscopic observations. In *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, volume 7735 of *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, page 0, July 2010.
- [99] J.-Q. Xia, **Viel, M.**, C. Baccigalupi, G. De Zotti, S. Matarrese, and L. Verde. Primordial Non-Gaussianity and the NRAO VLA Sky Survey. *ApJ*, 717:L17–L21, July 2010.
- [100] V. D’Odorico, F. Calura, S. Cristiani, and **Viel, M.** VizieR Online Data Catalog: CIV column densities in  $z < 2.5$  QSOs (D’odorico+, 2010). *VizieR Online Data Catalog*, 740:12715, June 2010.
- [101] **Viel, M.**, M. G. Haehnelt, and V. Springel. The effect of neutrinos on the matter distribution as probed by the intergalactic medium. *JCAP*, 6:15, June 2010.
- [102] L. Tornatore, S. Borgani, **Viel, M.**, and V. Springel. The impact of feedback on the low-redshift intergalactic medium. *MNRAS*, 402:1911–1926, March 2010.
- [103] V. Vitagliano, J.-Q. Xia, S. Liberati, and **Viel, M.** High-redshift cosmography. *JCAP*, 3:5, March 2010.
- [104] V. D’Odorico, F. Calura, S. Cristiani, and **Viel, M.** The rise of the CIV mass density at  $z < 2.5$ . *MNRAS*, 401:2715–2721, February 2010.
- [105] **Viel, M.** The Intergalactic Medium as a Cosmological Tool. *Nuclear Physics B Proceedings Supplements*, 194:156–161, October 2009.
- [106] **Viel, M.**, J. S. Bolton, and M. G. Haehnelt. Cosmological and astrophysical constraints from the Lyman  $\alpha$  forest flux probability distribution function. *MNRAS*, 399:L39–L43, October 2009.
- [107] J.-Q. Xia, **Viel, M.**, C. Baccigalupi, and S. Matarrese. The high redshift Integrated Sachs-Wolfe effect. *JCAP*, 9:3, September 2009.
- [108] A. Vallinotto, S. Das, D. N. Spergel, and **Viel, M.** Lenses in the Forest: Cross Correlation of the Lyman- $\alpha$  Flux with Cosmic Microwave Background Lensing. *Physical Review Letters*, 103(9):091304, August 2009.

- [109] E. Tescari, **Viel, M.**, L. Tornatore, and S. Borgani. Damped Lyman  $\alpha$  systems in high-resolution hydrodynamical simulations. *MNRAS*, 397:411–430, July 2009.
- [110] A. Boyarsky, J. Lesgourgues, O. Ruchayskiy, and **Viel, M.** Realistic Sterile Neutrino Dark Matter with KeV Mass does not Contradict Cosmological Bounds. *Physical Review Letters*, 102(20):201304, May 2009.
- [111] A. Boyarsky, J. Lesgourgues, O. Ruchayskiy, and **Viel, M.** Lyman- $\alpha$  constraints on warm and on warm-plus-cold dark matter models. *JCAP*, 5:12, May 2009.
- [112] E. Branchini, E. Ursino, A. Corsi, D. Martizzi, L. Amati, J. W. den Herder, M. Galeazzi, B. Gendre, J. Kaastra, L. Moscardini, F. Nicastro, T. Ohashi, F. Paerels, L. Piro, M. Roncarelli, Y. Takei, and **Viel, M.** Studying the Warm Hot Intergalactic Medium with Gamma-Ray Bursts. *ApJ*, 697:328–344, May 2009.
- [113] J.-Q. Xia and **Viel, M.** Early dark energy at high redshifts: status and perspectives. *JCAP*, 4:2, April 2009.
- [114] D. Crociani, L. Moscardini, **Viel, M.**, and S. Matarrese. The effects of primordial non-Gaussianity on the cosmological reionization. *MNRAS*, 394:133–141, March 2009.
- [115] **Viel, M.**, E. Branchini, K. Dolag, M. Grossi, S. Matarrese, and L. Moscardini. Primordial non-Gaussianities in the intergalactic medium. *MNRAS*, 393:774–782, March 2009.
- [116] L. Piro, J. W. den Herder, T. Ohashi, L. Amati, J. L. Atteia, S. Barthelmy, M. Barbera, D. Barret, S. Basso, M. Boer, S. Borgani, O. Boyarskiy, E. Branchini, G. Branduardi-Raymont, M. Briggs, G. Brunetti, C. Budtz-Jorgensen, D. Burrows, S. Campana, E. Caroli, G. Chincarini, F. Christensen, M. Cocchi, A. Comastri, A. Corsi, V. Cotroneo, P. Conconi, L. Colasanti, G. Cusumano, A. de Rosa, M. Del Santo, S. Etori, Y. Ezoe, L. Ferrari, M. Feroci, M. Finger, G. Fishman, R. Fujimoto, M. Galeazzi, A. Galli, F. Gatti, N. Gehrels, B. Gendre, G. Ghirlanda, G. Ghisellini, P. Giommi, M. Girardi, L. Guzzo, F. Haardt, I. Hefburn, W. Hermsen, H. Hoovers, A. Holland, J. in’t Zand, Y. Ishisaki, H. Kawahara, N. Kawai, J. Kaastra, M. Kippen, P. A. J. de Korte, C. Kouveliotou, A. Kusenko, C. Labanti, R. Lieu, C. Macculi, K. Makishima, G. Matt, P. Mazzotta, D. McCammon, M. Méndez, T. Mineo, S. Mitchell, K. Mitsuda, S. Molendi, L. Moscardini, R. Mushotzky, L. Natalucci, F. Nicastro, P. O’Brien, J. Osborne, F. Paerels, M. Page, S. Paltani, G. Pareschi, E. Perinati, C. Perola, T. Ponman, A. Rasmussen, M. Roncarelli, P. Rosati, O. Ruchayskiy, E. Quadrini, I. Sakurai, R. Salvaterra, S. Sasaki, G. Sato, J. Schaye, J. Schmitt, S. Sciortino, M. Shaposhnikov, K. Shinozaki, D. Spiga, Y. Suto, G. Tagliaferri, T. Takahashi, Y. Takei, Y. Tawara, P. Tozzi, H. Tsunemi, T. Tsuru, P. Ubertini, E. Ursino, **Viel, M.**, J. Vink, N. White, R. Willingale, R. Wijers, K. Yoshikawa, and N. Yamasaki. EDGE: Explorer of diffuse emission and gamma-ray burst explosions. *Experimental Astronomy*, 23:67–89, March 2009.
- [117] S. Borgani and **Viel, M.** The evolution of a pre-heated intergalactic medium. *MNRAS*, 392:L26–L30, January 2009.
- [118] L. Pasquini, A. Manescau, G. Avila, B. Delabre, H. Dekker, J. Liske, S. D’Odorico, F. Pepe, M. Dessauges, C. Lovis, D. Megevand, D. Queloz, S. Udry, S. Cristiani, P. Bonifacio, P. Dimarcantonio, V. D’Odorico, P. Molaro, E. Vanzella, **Viel, M.**, M. Haehnelt, B. Carswell,

- M. Murphy, R. Garcia-Lopez, J. M. Herreros, J. Perez, M. R. Zapatero, R. Rebolo, G. Israelian, E. Martin, F. Zerbi, P. Spanò, S. Levshakov, N. Santos, and S. Zucker. ESPRESSO: A High Resolution Spectrograph for the Combined Coudé Focus of the VLT. In A. Moorwood, editor, *Science with the VLT in the ELT Era*, page 395, 2009.
- [119] J. Liske, L. Pasquini, P. Bonifacio, F. Bouchy, R. F. Carswell, S. Cristiani, M. Dessauges, S. D’Odorico, V. D’Odorico, A. Grazian, R. Garcia-Lopez, M. Haehnelt, G. Israelian, C. Lovis, E. Martin, M. Mayor, P. Molaro, M. T. Murphy, F. Pepe, D. Queloz, R. Rebolo, S. Udry, E. Vanzella, **Viel, M.**, T. Wiklind, M. Zapatero, and S. Zucker. From Espresso to Codex. In A. Moorwood, editor, *Science with the VLT in the ELT Era*, page 243, 2009.
- [120] P. Salucci, S. Borgani, C. Frenk, L. Moscardini, and **Viel, M.** The Impact of Simulations in Cosmology and Galaxy Formation A summary of the Workshop NOVICOSMO 2008. *ArXiv e-prints*, December 2008.
- [121] V. D’Odorico, M. Bruscoli, F. Saitta, F. Fontanot, **Viel, M.**, S. Cristiani, and P. Monaco. The quasar proximity effect at redshift  $z \sim 2.6$  with the From Lines to Overdensities approach. *MNRAS*, 389:1727–1738, October 2008.
- [122] J. Liske, A. Grazian, E. Vanzella, M. Dessauges, **Viel, M.**, L. Pasquini, M. Haehnelt, S. Cristiani, F. Pepe, P. Bonifacio, F. Bouchy, S. D’Odorico, V. D’Odorico, S. Levshakov, C. Lovis, M. Mayor, P. Molaro, L. Moscardini, M. Murphy, D. Queloz, S. Udry, T. Wiklind, and S. Zucker. E-ELT and the Cosmic Expansion History - A Far Stretch? *The Messenger*, 133:10–13, September 2008.
- [123] M. Pierleoni, E. Branchini, and **Viel, M.** The relation between Lyman  $\alpha$  absorbers and gas-rich galaxies in the local Universe. *MNRAS*, 388:282–292, July 2008.
- [124] **Viel, M.** Neutrinos in cosmology. *Nuovo Cimento B Serie*, 123:902–904, June 2008.
- [125] **Viel, M.**, J. M. Colberg, and T.-S. Kim. On the importance of high-redshift intergalactic voids. *MNRAS*, 386:1285–1293, May 2008.
- [126] J. Liske, A. Grazian, E. Vanzella, M. Dessauges, **Viel, M.**, L. Pasquini, M. Haehnelt, S. Cristiani, F. Pepe, G. Avila, P. Bonifacio, F. Bouchy, H. Dekker, B. Delabre, S. D’Odorico, V. D’Odorico, S. Levshakov, C. Lovis, M. Mayor, P. Molaro, L. Moscardini, M. T. Murphy, D. Queloz, P. Shaver, S. Udry, T. Wiklind, and S. Zucker. Cosmic dynamics in the era of Extremely Large Telescopes. *MNRAS*, 386:1192–1218, May 2008.
- [127] J. S. Bolton, **Viel, M.**, T.-S. Kim, M. G. Haehnelt, and R. F. Carswell. Possible evidence for an inverted temperature-density relation in the intergalactic medium from the flux distribution of the Ly $\alpha$  forest. *MNRAS*, 386:1131–1144, May 2008.
- [128] D. Crociani, **Viel, M.**, L. Moscardini, M. Bartelmann, and M. Meneghetti. Cosmic reionization in dynamic quintessence cosmology. *MNRAS*, 385:728–736, April 2008.
- [129] F. Saitta, V. D’Odorico, M. Bruscoli, S. Cristiani, P. Monaco, and **Viel, M.** Tracing the gas at redshift 1.7-3.5 with the Ly $\alpha$  forest: the FLO approach. *MNRAS*, 385:519–530, March 2008.



- [130] **Viel, M.**, G. D. Becker, J. S. Bolton, M. G. Haehnelt, M. Rauch, and W. L. W. Sargent. How Cold Is Cold Dark Matter? Small-Scales Constraints from the Flux Power Spectrum of the High-Redshift Lyman- $\alpha$  Forest. *Physical Review Letters*, 100(4):041304, February 2008.
- [131] L. Pasquini, G. Avila, B. Délabre, H. Dekker, S. D’Odorico, J. Liske, A. Manescau, P. Bonifacio, S. Cristiani, V. D’Odorico, P. Molaro, E. Vanzella, P. Santin, **Viel, M.**, M. Dessauges-Zavadsky, C. Lovis, M. Mayor, F. Pepe, D. Queloz, S. Udry, M. Haehnelt, M. Murphy, R. Garcia-Lopez, F. Bouchy, S. Levshakov, and S. Zucker. Codex. In N. C. Santos, L. Pasquini, A. C. M. Correia, and M. Romaniello, editors, *Precision Spectroscopy in Astrophysics*, pages 249–253, 2008.
- [132] **Viel, M.** *The Lyman- $\alpha$  Forest as a Probe of the Coldness of Dark Matter*, page 255. 2008.
- [133] T.-S. Kim, J. S. Bolton, **Viel, M.**, M. G. Haehnelt, and R. F. Carswell. An improved measurement of the flux distribution of the Ly $\alpha$  forest in QSO absorption spectra: the effect of continuum fitting, metal contamination and noise properties. *MNRAS*, 382:1657–1674, December 2007.
- [134] J. Lesgourgues, **Viel, M.**, M. G. Haehnelt, and R. Massey. A combined analysis of 3D weak lensing, Lyman- $\alpha$  forest and WMAP year three data. *JCAP*, 11:8, November 2007.
- [135] J. W. den Herder, L. Piro, T. Ohashi, L. Amati, J. Atteia, S. Barthelmy, M. Barbera, D. Barret, S. Basso, M. Boer, S. Borgani, O. Boyarskiy, E. Branchini, G. Branduardi-Raymont, M. Briggs, G. Brunetti, C. Budtz-Jorgensen, D. Burrows, S. Campana, E. Caroli, G. Chincarini, F. Christensen, M. Cocchi, A. Comastri, A. Corsi, V. Cotroneo, P. Conconi, L. Colasanti, G. Cusamano, A. de Rosa, M. Del Santo, S. Etti, Y. Ezoe, L. Ferrari, M. Feroci, M. Finger, G. Fishman, R. Fujimoto, M. Galeazzi, A. Galli, F. Gatti, N. Gehrels, B. Gendre, G. Ghirlanda, G. Ghisellini, P. Giommi, M. Girardi, L. Guzzo, F. Haardt, I. Hepburn, W. Hermsen, H. Hoovers, A. Holland, J. In’t Zand, Y. Ishisaki, H. Kawahara, N. Kawai, J. Kaastra, M. Kippen, P. A. J. de Korte, C. Kouveliotou, A. Kusenko, C. Labanti, R. Lieu, C. Macculi, K. Makishima, G. Matt, P. Mazotta, D. McCammon, M. Méndez, T. Mineo, S. Mitchell, K. Mitsuda, S. Molendi, L. Moscardini, R. Mushotzky, L. Natalucci, F. Nicastro, P. O’Brien, J. Osborne, F. Paerels, M. Page, S. Paltani, G. Pareschi, E. Perinati, C. Perola, T. Ponman, A. Rasmussen, M. Roncarelli, P. Rosati, O. Ruchayskiy, E. Quadrini, I. Sakurai, R. Salvaterra, S. Sasaki, G. Sato, J. Schaye, J. Schmitt, S. Scioritino, M. Shaposhnikov, K. Shinozaki, D. Spiga, Y. Suto, G. Tagliaferri, T. Takahashi, Y. Takei, Y. Tawara, P. Tozzi, H. Tsunemi, T. Tsuru, P. Ubertini, E. Ursino, **Viel, M.**, J. Vink, N. White, R. Willingale, R. Wijers, K. Yoshikawa, and N. Yamasaki. EDGE: explorer of diffuse emission and gamma-ray burst explosions. In *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, volume 6688 of *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, page 5, September 2007.
- [136] S. Cristiani, G. Avila, P. Bonifacio, F. Bouchy, B. Carswell, S. D’Odorico, V. D’Odorico, B. Delabre, H. Dekker, M. Dessauges, P. Dimarcantonio, R. Garcia-Lopez, A. Grazian, M. Haehnelt, J. M. Herreros, G. Israelian, S. Levshakov, J. Liske, C. Lovis, A. Manescau, E. Martin, M. Mayor, D. Megevand, P. Molaro, M. Murphy, L. Pasquini, F. Pepe, J. Perez, D. Queloz, R. Rebolo, P. Santin, P. Shaver, P. Spanò, S. Udry, E. Vanzella, **Viel, M.**, M. R.

- Zapatero, F. Zerbi, and S. Zucker. The CODEX-ESPRESSO experiment: Cosmic dynamics, fundamental physics, planets and much more... *Nuovo Cimento B Serie*, 122:1165–1170, September 2007.
- [137] M. Ricotti, A. Pontzen, and **Viel, M.** Is the Concentration of Dark Matter Halos at Virialization Universal? *ApJ*, 663:L53–L56, July 2007.
- [138] **Viel, M.** Neutrinos and the Lyman- $\alpha$  forest: myth or reality? *Nuclear Physics B Proceedings Supplements*, 168:54–56, June 2007.
- [139] **Viel, M.** The Lyman-alpha Forest as a probe of Cosmology and Fundamental Physics. In *HI Survival Through Cosmic Times*, page 69, June 2007.
- [140] C. Porciani, **Viel, M.**, and S. J. Lilly. Strong Mg II Systems in Quasar and Gamma-Ray Burst Spectra. *ApJ*, 659:218–224, April 2007.
- [141] J. A. Regan, M. G. Haehnelt, and **Viel, M.** Numerical simulations of the Lyman  $\alpha$  forest - a comparison of GADGET-2 and ENZO. *MNRAS*, 374:196–205, January 2007.
- [142] V. D’Odorico, **Viel, M.**, F. Saitta, S. Cristiani, S. Bianchi, B. Boyle, S. Lopez, J. Maza, and P. Outram. Tomography of the intergalactic medium with Ly $\alpha$  forests in close QSO pairs. *MNRAS*, 372:1333–1344, November 2006.
- [143] J. I. Read, A. P. Pontzen, and **Viel, M.** On the formation of dwarf galaxies and stellar haloes. *MNRAS*, 371:885–897, September 2006.
- [144] **Viel, M.** The Lyman- $\alpha$  Forest As a Cosmological Probe. In S. J. Kannappan, S. Redfield, J. E. Kessler-Silacci, M. Landriau, and N. Drory, editors, *New Horizons in Astronomy: Frank N. Bash Symposium*, volume 352 of *Astronomical Society of the Pacific Conference Series*, pages 191–205, September 2006.
- [145] **Viel, M.**, J. Lesgourgues, M. G. Haehnelt, S. Matarrese, and A. Riotto. Can Sterile Neutrinos Be Ruled Out as Warm Dark Matter Candidates? *Physical Review Letters*, 97(7):071301, August 2006.
- [146] **Viel, M.**, M. G. Haehnelt, and A. Lewis. The Lyman  $\alpha$  forest and WMAP year three. *MNRAS*, 370:L51–L55, July 2006.
- [147] L. Piro, L. Amati, M. Barbera, S. Borgani, A. Bazzano, E. Branchini, G. Brunetti, S. Campana, E. Caroli, M. Cocchi, S. Colafrancesco, L. Colasanti, A. Corsi, E. Costa, G. Cusumano, M. Del Santo, J.-W. Den Herder, A. De Rosa, G. Di Cocco, S. Ettori, M. Feroci, F. Fiore, R. Fusco-Femiano, M. Galeazzi, A. Galli, F. Gatti, B. Gendre, L. Guzzo, W. Hermsen, J. in’t Zand, J. Kaastra, G. La Rosa, C. Labanti, M. Marisaldi, P. Mazzotta, T. Mineo, S. Molendi, L. Moscardini, L. Natalucci, F. Nicastro, G. Pareschi, E. Pian, E. Quadrini, M. Roncarelli, J. Shaye, G. Tagliaferri, P. Tozzi, P. Ubertini, E. Ursino, and **Viel, M.** ESTREMO/WFXRT: Extreme physics in the TRansient and Evolving COsmos. In *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, volume 6266 of *Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series*, page 0, June 2006.

- [148] S. Zaroubi, **Viel, M.**, A. Nusser, M. Haehnelt, and T.-S. Kim. The matter power spectrum from the Ly $\alpha$  forest: an optical depth estimate. *MNRAS*, 369:734–750, June 2006.
- [149] **Viel, M.**, M. G. Haehnelt, and V. Springel. Testing the accuracy of the hydrodynamic particle-mesh approximation in numerical simulations of the Lyman  $\alpha$  forest. *MNRAS*, 367:1655–1665, April 2006.
- [150] J. S. Bolton, M. G. Haehnelt, **Viel, M.**, and R. F. Carswell. Spatial fluctuations in the spectral shape of the ultraviolet background at  $2 < z < 3$  and the reionization of helium. *MNRAS*, 366:1378–1390, March 2006.
- [151] **Viel, M.** and M. G. Haehnelt. Cosmological and astrophysical parameters from the Sloan Digital Sky Survey flux power spectrum and hydrodynamical simulations of the Lyman  $\alpha$  forest. *MNRAS*, 365:231–244, January 2006.
- [152] L. Pasquini, S. Cristiani, H. Dekker, M. Haehnelt, P. Molaro, F. Pepe, G. Avila, B. Delabre, S. D’Odorico, J. Liske, P. Shaver, P. Bonifacio, S. Borgani, V. D’Odorico, E. Vanzella, F. Bouchy, M. Dessauges, C. Lovis, M. Mayor, D. Queloz, S. Udry, M. Murphy, **Viel, M.**, A. Grazian, S. Levshakov, L. Moscardini, T. Wiklind, and S. Zucker. CODEX: measuring the acceleration of the universe and beyond. In P. Whitelock, M. Dennefeld, and B. Leibundgut, editors, *The Scientific Requirements for Extremely Large Telescopes*, volume 232 of *IAU Symposium*, pages 193–197, 2006.
- [153] **Viel, M.** Cosmology and Fundamental Physics with the Ly $\alpha$  forest. In *Bernard’s Cosmic Stories: From Primordial Fluctuations to the Birth of Stars and Galaxies*, page 11, 2006.
- [154] L. Pasquini, S. Cristiani, H. Dekker, M. Haehnelt, P. Molaro, F. Pepe, G. Avila, B. Delabre, S. D’Odorico, J. Liske, P. Shaver, P. Bonifacio, S. Borgani, V. D’Odorico, E. Vanzella, F. Bouchy, M. Dessauges-Lavadsky, C. Lovis, M. Mayor, D. Queloz, S. Udry, M. Murphy, **Viel, M.**, A. Grazian, S. Levshakov, L. Moscardini, T. Wiklind, and S. Zucker. CODEX: Measuring the Expansion of the Universe (and beyond). *The Messenger*, 122:10–14, December 2005.
- [155] M. Beltrán, J. García-Bellido, J. Lesgourgues, and **Viel, M.** Squeezing the window on isocurvature modes with the Lyman- $\alpha$  forest. *PhRvD*, 72(10):103515, November 2005.
- [156] M. Rauch, G. D. Becker, **Viel, M.**, W. L. W. Sargent, A. Smette, R. A. Simcoe, T. A. Barlow, and M. G. Haehnelt. Expansion and Collapse in the Cosmic Web. *ApJ*, 632:58–80, October 2005.
- [157] **Viel, M.**, E. Branchini, R. Cen, J. P. Ostriker, S. Matarrese, P. Mazzotta, and B. Tully. Tracing the warm-hot intergalactic medium in the local Universe. *MNRAS*, 360:1110–1122, July 2005.
- [158] **Viel, M.**, J. Lesgourgues, M. G. Haehnelt, S. Matarrese, and A. Riotto. Constraining warm dark matter candidates including sterile neutrinos and light gravitinos with WMAP and the Lyman- $\alpha$  forest. *PhRvD*, 71(6):063534, March 2005.

- [159] S. Cristiani, V. D’Odorico, F. Saitta, **Viel, M.**, S. Bianchi, B. Boyle, S. Lopez, J. Maza, and P. Outram. Probing the 3-D matter distribution at  $z \sim 2$  with QSO multiple lines of sight. In P. Williams, C.-G. Shu, and B. Menard, editors, *IAU Colloq. 199: Probing Galaxies through Quasar Absorption Lines*, pages 412–414, March 2005.
- [160] **Viel, M.** The Lyman- $\alpha$  forest as a probe of fundamental physics. In P. Williams, C.-G. Shu, and B. Menard, editors, *IAU Colloq. 199: Probing Galaxies through Quasar Absorption Lines*, pages 255–260, March 2005.
- [161] J. S. Bolton, M. G. Haehnelt, **Viel, M.**, and V. Springel. Constraints on the meta-galactic hydrogen ionisation rate from the Lyman- $\alpha$  forest opacity. In P. Williams, C.-G. Shu, and B. Menard, editors, *IAU Colloq. 199: Probing Galaxies through Quasar Absorption Lines*, pages 219–224, March 2005.
- [162] J. S. Bolton, M. G. Haehnelt, **Viel, M.**, and V. Springel. The Lyman  $\alpha$  forest opacity and the metagalactic hydrogen ionization rate at  $z \sim 2-4$ . *MNRAS*, 357:1178–1188, March 2005.
- [163] J. Bergeron, P. Petitjean, B. Aracil, C. Pichon, E. Scannapieco, R. Srianand, P. Boisse, R. F. Carswell, H. Chand, S. Cristiani, A. Ferrara, M. Haehnelt, A. Hughes, T.-S. Kim, C. Ledoux, P. Richter, and **Viel, M.** The large programme ”Cosmic Evolution of the IGM”. *The Messenger*, 118:40–44, December 2004.
- [164] **Viel, M.**, J. Weller, and M. G. Haehnelt. Constraints on the primordial power spectrum from high-resolution Lyman  $\alpha$  forest spectra and WMAP. *MNRAS*, 355:L23–L28, December 2004.
- [165] **Viel, M.** Inferring the dark matter power spectrum from the Lyman-Alpha forest in high-resolution QSO absorption spectra. In R. Dettmar, U. Klein, and P. Salucci, editors, *Baryons in Dark Matter Halos*, page 21, December 2004.
- [166] **Viel, M.**, M. G. Haehnelt, and V. Springel. Inferring the dark matter power spectrum from the Lyman  $\alpha$  forest in high-resolution QSO absorption spectra. *MNRAS*, 354:684–694, November 2004.
- [167] **Viel, M.** Quantitative Cosmology with the Lyman-Alpha Forest. In *KITP Program: Galaxy-Intergalactic Medium Interactions*, page 31, November 2004.
- [168] T.-S. Kim, **Viel, M.**, M. G. Haehnelt, B. Carswell, and S. Cristiani. Erratum: The power spectrum of the flux distribution in the Lyman  $\alpha$  forest of a large sample of UVES QSO Absorption Spectra (LUQAS)\*. *MNRAS*, 351:1471–1472, July 2004.
- [169] **Viel, M.**, M. Haehnelt, T. . Kim, B. Carswell, S. Cristiani, A. Heavens, L. Hernquist, S. Matarrese, and V. Springel. The Lyman-alpha forest according to LUQAS. *ArXiv Astrophysics e-prints*, May 2004.
- [170] **Viel, M.**, M. G. Haehnelt, R. F. Carswell, and T.-S. Kim. The effect of (strong) discrete absorption systems on the Lyman  $\alpha$  forest flux power spectrum. *MNRAS*, 349:L33–L37, April 2004.

- [171] **Viel, M.**, S. Matarrese, A. Heavens, M. G. Haehnelt, T.-S. Kim, V. Springel, and L. Hernquist. The bispectrum of the Lyman  $\alpha$  forest at  $z \sim 2$ -2.4 from a large sample of UVES QSO absorption spectra (LUQAS). *MNRAS*, 347:L26–L30, January 2004.
- [172] T.-S. Kim, **Viel, M.**, M. G. Haehnelt, R. F. Carswell, and S. Cristiani. The power spectrum of the flux distribution in the Lyman  $\alpha$  forest of a large sample of UVES QSO absorption spectra (LUQAS). *MNRAS*, 347:355–366, January 2004.
- [173] **Viel, M.** Cosmology with the lyman-alpha forest in the WMAP era. *ArXiv Astrophysics e-prints*, October 2003.
- [174] **Viel, M.** Numerical models of the intergalactic medium. *The Observatory*, 123:174–175, June 2003.
- [175] **Viel, M.**, E. Branchini, R. Cen, S. Matarrese, P. Mazzotta, and J. P. Ostriker. Detecting X-ray filaments in the low-redshift Universe with XEUS and Constellation-X. *MNRAS*, 341:792–804, May 2003.
- [176] **Viel, M.**, S. Matarrese, T. Theuns, D. Munshi, and Y. Wang. Dark energy effects on the Lyman  $\alpha$  forest. *MNRAS*, 340:L47–L51, April 2003.
- [177] **Viel, M.**, S. Matarrese, H. J. Mo, T. Theuns, and M. G. Haehnelt. Modelling the IGM and the Ly  $\alpha$  forest at high redshift from the dark matter distribution. *MNRAS*, 336:685–698, October 2002.
- [178] T. Theuns, **Viel, M.**, S. Kay, J. Schaye, R. F. Carswell, and P. Tzanavaris. Galactic Winds in the Intergalactic Medium. *ApJ*, 578:L5–L8, October 2002.
- [179] **Viel, M.**, S. Matarrese, H. J. Mo, M. G. Haehnelt, and T. Theuns. Probing the intergalactic medium with the Ly $\alpha$  forest along multiple lines of sight to distant QSOs. *MNRAS*, 329:848–862, February 2002.