

## Publications

### Research Articles in Refereed Journals

- (1) J. Mashreghi, A. Stepanyan. Nonlinear maps preserving the reduced minimum modulus of operators. *Linear Algebra Appl.*, to appear.
- (2) O. El-Fallah, E. Fricain, K. Kellay, J. Mashreghi, T. Ransford. Constructive approximation in de Branges–Rovnyak spaces. *Constr. Approx.*, to appear.
- (3) O. El-Fallah, K. Kellay, H. Klaja, J. Mashreghi, T. Ransford. Dirichlet spaces with superharmonic weights and de Branges–Rovnyak spaces. *Complex Anal. Oper. Theory*, to appear.
- (4) H. Klaja, J. Mashreghi, T. Ransford. On mapping theorems for numerical range. *Proc. Amer. Math. Soc.*, to appear.
- (5) E. Frician, M. Karaki, J. Mashreghi. A group structure on  $\mathbb{D}$  and its application for composition operators. *Ann. Funct. Anal.*, Special issue in honor of A. To-Ming Lau, 7(1):76–95, 2015.
- (6) O. El-Fallah, K. Kellay, J. Mashreghi, T. Ransford. One-box conditions for Carleson measures for the Dirichlet space. *Proc. Amer. Math. Soc.*, to appear.
- (7) J. Mashreghi, T. Ransford. A Gleason–Kahane–Żelazko theorem for modules and applications to holomorphic function spaces. *J. Lond. Math. Soc.*, 47 (6):1014–1020, 2015.
- (8) A. Bourhim, J. Mashreghi. Maps preserving the local spectrum of product of operators. *Glasg. Math. J.*, 57(3):709–7018, 2015.
- (9) J. Mashrehi, S. Pouliasis. Condenser capacity, exponential Blaschke products and universal covering maps. *Proc. Amer. Math. Soc.*, 143(8):3547–3559, 2015.
- (10) A. Bourhim, J. Mashreghi. Maps preserving the local spectrum of triple product of operators. *Linear Multilinear Algebra*, 63(4):765–773, 2015.
- (11) A. Bourhim, J. Mashreghi, A. Stepanyan. Nonlinear maps preserving the minimum and surjectivity moduli. *Linear Algebra Appl.*, 463:171–189, 2014.
- (12) E. Fricain, J. Mashreghi, D. Seco. Cyclicity in reproducing kernel Hilbert spaces of analytic functions. *Comput. Methods Funct. Theory*, 14(4):665–680, 2014.
- (13) J. Mashreghi, D. Timotin. Nonextreme de Branges–Rovnyak spaces as models for contractions. *Integral Equ. Oper. Theory*, 80(1):137–152, 2014.
- (14) J. Mashreghi, M. Shabankhah. Composition of inner functions. *Canad. J. Math.*, 66(2):387–399, 2014.
- (15) E. Fricain, J. Mashreghi. On a characterization of finite Blaschke products. *Complex Var. Elliptic Equ.*, 59(3):362–368, 2014.
- (16) A. Bourhim, J. Mashreghi. Local spectral radius preservers. *Integral Equ. Oper. Theory*, 76(1):95–104, 2013.
- (17) D. Drissi, J. Mashreghi. Resolvent spaces for algebraic operators and applications. *J. Math. Anal. Appl.*, 402(1):179–184, 2013.

- (18) J. Mashreghi, M. Shabankhah. Composition operators on finite rank model subspaces. *Glasg. Math. J.*, 55(1):69–83, 2013.
- (19) K. Kellay, J. Mashreghi. On zero sets in the Dirichlet space. *J. Geom. Anal.*, 22(4):1055–1070, 2012.
- (20) J. Mashreghi, M. Nasri. A proximal augmented Lagrangian method for equilibrium problems. *Appl. Anal.*, 91(1):157–172, 2012.
- (21) J. Mashreghi, M. Nasri. Hybrid Lagrange multiplier approaches for solving infinite dimensional equilibrium problems with cone constraints. *J. Nonlinear Convex Anal.*, 13(2):331–349, 2012.
- (22) J. Mashreghi, M. Shabankhah. Admissible functions for the Dirichlet space. *Studia Math.*, 198(2):147–156, 2010.
- (23) A. Baranov, I. Chalendar, E. Fricain, J. Mashreghi, D. Timotin. Bounded symbols and reproducing kernel thesis for truncated Toeplitz operators. *J. Funct. Anal.*, 259(10):2673–2701, 2010.
- (24) J. Mashreghi, M. Nasri. Strong convergence of an inexact proximal point algorithm for equilibrium problems in Banach spaces. *Numer. Funct. Anal. Optim.*, 31(7-9):1053–1071, 2010.
- (25) A. Baranov, E. Fricain, J. Mashreghi. Weighted norm inequalities for de Branges–Rovnyak spaces and their applications. *Amer. J. Math.*, 132(1):125–155, 2010.
- (26) J. Mashreghi, M. Nasri. Forcing strong convergence of Korpelevich's method in Banach spaces with its applications in game theory. *Nonlinear Anal.*, 72(3-4):2086–2099, 2010.
- (27) J. Mashreghi, M. Shabankhah. Zero sets and uniqueness sets with one cluster point for the Dirichlet space. *J. Math. Anal. Appl.*, 357(2):498–503, 2009.
- (28) J. Mashreghi. The rate of increase of mean values of functions in Hardy spaces, *J. Aust. Math. Soc.*, 86(2):199–204, 2009.
- (29) J. Mashreghi, M. Shabankhah. Integral means of the logarithmic derivative of Blaschke products. *Comput. Methods Funct. Theory*, 9(2):421–433, 2009.
- (30) E. Fricain, J. Mashreghi. Integral representations of the  $n$ -th derivative in de Branges-Rovnyak spaces and the norm convergence of its reproducing kernel. *Ann. Inst. Fourier (Grenoble)*, 58(6):2113–2135, 2008.
- (31) E. Fricain, J. Mashreghi. Integral means of the derivatives of Blaschke products. *Glasg. Math. J.*, 50(2):233–249, 2008.
- (32) M. Jaber, M. Dehghan, J. Mashreghi. Dynamics of the Difference Equation  $x_{n+1} = \frac{x_n + p x_{n-k}}{x_n + q}$ . *Comput. Math. Appl.*, 56(1):186–198, 2008.
- (33) M. Jaber, J. Mashreghi. On the population model of the non-autonomous logistic equation of second order with period-two parameters. *J. Difference Equ. Appl.*, 14(3):231–257, 2008.
- (34) E. Fricain, J. Mashreghi. Boundary behavior of functions in the de Branges-Rovnyak spaces. *Complex Anal. Oper. Theory*, 2(1):87–97, 2008.

- (35) E. Fricain, J. Mashreghi. Exceptional sets for the derivatives of Blaschke products. *Proc. St. Petersburg Math. Soc.*, AMS Translation Series 2, 222, 13:163–170, 2008.
- (36) J. Mashreghi, M. Pouryayevali. Argument of outer functions on the real line. *Illinois J. Math.*, 51(2):499–511, 2007.
- (37) J. Mashreghi, R. Rivard. On a conjecture about the eigenvalues of doubly stochastic matrices. *Linear Multilinear Algebra*, 55(5):491–498, 2007.
- (38) E. Fricain, J. Mashreghi. Exceptional sets for the derivatives of Blaschke products. *Trudy Sankt Peterburgskogo Matematicheskogo Obshchestva*, (Russian), 13:203–212, 2007.
- (39) V. Havin, J. Mashreghi, F. Nazarov. The Beurling–Malliavin multiplier theorem, the seventh proof. *St. Petersburg Math. J.*, AMS Translations, 17(5):699–744, 2006.
- (40) V. Havin, J. Mashreghi, F. Nazarov. The Beurling–Malliavin multiplier theorem, the seventh proof. *Algebra i analiz*, (Russian), 17(5):3–68, 2005.
- (41) J. Mashreghi. Generalized Lipschitz functions. *Comput. Methods Funct. Theory*, 5(2):431–444, 2005.
- (42) J. Mashreghi, M. Pouryayevali. On the regularity of S-differential metric. *Canad. Math. Bull.*, 48(4):601–606, 2005.
- (43) J. Mashreghi, T. Ransford. Binomial sums and functions of exponential type. *Bull. Lond. Math. Soc.*, 37(1):15–24, 2005.
- (44) V. Havin, J. Mashreghi. Admissible majorants for model subspaces of  $H^2(\mathbb{R})$ , Part II, fast winding of the generating inner function. *Canad. J. Math.*, 55(6):1264–1301, 2003.
- (45) V. Havin, J. Mashreghi. Admissible majorants for model subspaces of  $H^2(\mathbb{R})$ , Part I, slow winding of the generating inner function. *Canad. J. Math.*, 55(6):1231–1263, 2003.
- (46) J. Mashreghi. Hilbert transform of  $\log |f|$ . *Proc. Amer. Math. Soc.*, 130(3):683–688, 2002.
- (47) J. Mashreghi. Expanding a finite Blaschke product. *Complex Var. Theory Appl.*, 47(3):255–258, 2002.
- (48) J. Mashreghi. A new proof of Levy’s theorem. *Ital. J. Pure Appl. Math.*, 12:113–117, 2002.

Articles in Conference Proceedings, Expository Articles, etc.

- (49) S. Garcia, J. Mashreghi, W. Ross. A survey on finite Blaschke products. *Mittag-Leffler conference proceedings*, to appear.
- (50) A. Bourhim, J. Mashreghi. Composition operators on the Hardy–Hilbert space  $H^2$  and model spaces  $K_\Theta$ . *Mittag-Leffler conference proceedings*, to appear.
- (51) S. Garcia, J. Mashreghi, W. Ross. Real complex functions. *Proc. conference in honor of J. Esterle*, Bordeaux, to appear.

- (52) J. Mashreghi. Polynomial approximation in analytic function spaces. *CMS Notes*, 47(6):12–13, 2015.
- (53) A. Bourhim, J. Mashreghi. A survey on preservers of spectra and local spectra. *Invariant subspaces of the shift operator*, *Contemp. Math.*, 638:45–98, 2015.
- (54) E. Fricain, J. Mashreghi. Integral representations of the derivatives in  $\mathcal{H}(b)$  spaces. *Invariant subspaces of the shift operator*, *Contemp. Math.*, 638:137–178, 2015.
- (55) E. Fricain, J. Mashreghi, D. Seco. Cyclicity in non-extreme de Branges-Rovnyak spaces. *Invariant subspaces of the shift operator*, *Contemp. Math.*, 638:131–136, 2015.
- (56) J. Mashreghi. Blaschke products as solutions of a functional equation. *Blaschke products and their applications*, *Fields Inst. Commun.*, Springer, New York, 65:113–118, 2013.
- (57) J. Mashreghi. On a family of outer functions. *Complex Analysis and Potential Theory*, CRM Proc. Lecture Notes, Amer. Math. Soc., Providence, RI, 55:193–199, 2012.
- (58) O. El-Fallah, K. Kellay, J. Mashreghi, T. Ransford. A self-contained proof of the strong-type capacity inequality for the Dirichlet space. *Complex Analysis and Potential Theory*, CRM Proc. Lecture Notes, Amer. Math. Soc., Providence, RI, 55:1–20, 2012.
- (59) J. Mashreghi, T. Ransford and M. Shabankhah. Argument of the zero sets in the Dirichlet space. *Hilbert Spaces of Analytic Functions*, CRM Proc. Lecture Notes, Amer. Math. Soc., Providence, RI, 51:143–148, 2010.
- (60) J. Mashreghi. A formula for the logarithmic derivative and its applications. *Hilbert Spaces of Analytic Functions*, CRM Proc. Lecture Notes, Amer. Math. Soc., Providence, RI, 51:197–201, 2010.
- (61) J. Mashreghi, T. Ransford Using entire functions to analyse power growth. *Banach Algebras and Their Applications*, *Contemp. Math.*, 363:235–240, 2004.
- (62) J. Mashreghi. On the convexity of the mean value of a subharmonic function on annular domains. *Int. Math. J.*, 2(4):373–377, 2002.
- (63) J. Mashreghi. Extending functions in the model subspaces of  $H^2(\mathbb{R})$  to  $\mathbb{C}$ . *Bull. Iranian Math. Soc.*, 28(1):43–55, 2002.
- (64) J. Mashreghi, Z. Mashreghi. On the closed form of power series. *Crux Math.*, 27:436–439, 2001.
- (65) J. Mashreghi. Improper integrals. *Crux Math.*, 27:188–190, 2001.
- (66) J. Mashreghi. Stability of functions with absolutely convergent Fourier sums subject to a holomorphic composition. *Far East J. Math. Sci.*, Special Volume for Functional Analysis and its Applications, Part I, 109–127, 2001.

## Proceedings

- (67) E. Fricain, J. Mashreghi, W. Ross. *Invariant Subspaces of the Shift Operator*. Proceedings of the CRM Workshop held at the University of Montreal, QC, August 26–30, 2013. Contemporary Mathematics, 638. CRM Proceedings. American Mathematical Society, Providence, RI, viii+317 pp., 2015
- (68) E. Fricain, J. Mashreghi. *Blaschke products and Their Applications*. Proceedings of the conference held at the University of Toronto, Toronto, ON, July 25–29, 2011. Fields Institute Communications, 65. Springer, New York, x+319 pp., 2013.
- (69) A. Boivin, J. Mashreghi. *Complex Analysis and Potential Theory*. Proceedings of the International Conference held in the University of Montreal, QC, June 20–23, 2011, in honor of P. Gauthier and K. Gowrisankarran. CRM Proceedings & Lecture Notes, 55. American Mathematical Society, Providence, RI, xii+329 pp., 2012.
- (70) J. Mashreghi, T. Ransford, K. Seip. *Hilbert Spaces of Analytic Functions*. Papers from the workshop held in the University of Montreal, QC, December 8–12, 2008. CRM Proceedings & Lecture Notes, 51. American Mathematical Society, Providence, RI, xii+214 pp., 2010.

### Monographs

- (71) J. Mashreghi. *Amissible Majorants*. CRM monographs, to appear.
- (72) J. Mashreghi. *Derivatives of Inner Functions*. Fields Institute Monographs 31, Springer, New York, x+169 pp., 2013.

### Books

- (73) S. Garcia, J. Mashreghi, W. Ross. *Introduction to Model Spaces and their Operators*. Cambridge Studies in Advanced Mathematics, Cambridge University Press, Cambridge, xii+332 pp., 2016.
- (74) E. Fricain, J. Mashreghi. *Theory of  $\mathcal{H}(b)$  Spaces*, Volume II. New Monographs in Mathematics 21, Cambridge University Press, Cambridge, xv+690 pp., 2015.
- (75) E. Fricain, J. Mashreghi. *Theory of  $\mathcal{H}(b)$  Spaces*, Volume I. New Monographs in Mathematics 20, Cambridge University Press, Cambridge, xv+681 pp., 2015.
- (76) O. El-Fallah, K. Kellay, J. Mashreghi, T. Ransford. *A Primer on the Dirichlet Space*. Cambridge Tracts in Mathematics 203, Cambridge University Press, Cambridge, x+221 pp., 2014.
- (77) J. Mashreghi. *Representation Theorems in Hardy Spaces*. London Mathematical Society Student Text Series 74, Cambridge University Press, Cambridge, xii+372, 2009.
- (78) J. Mashreghi. *Structures algébriques*. Loze-Dion éditeur inc., Montréal, iv+205 pp., 2007.
- (79) J. Mashreghi. *Analyse abstraite*. Loze-Dion éditeur inc., Montréal, ix+296 pp., 2006.