

ILIJAS FARAH'S PUBLICATIONS

BOOKS

- (1) *Analytic quotients: theory of liftings for quotients over analytic ideals on the integers*, Memoirs of the American Mathematical Society, **148**, number 702, (2000) 177 pp.
- (2) *Some Applications of the Method of Forcing*, Yenisei, Moscow (1995) (146 p.) (coauthored with Stevo Todorčević)

PAPERS

- (1) *A dichotomy for the number of ultrapowers*, (joint with Saharon Shelah), submitted, December 2009.
- (2) *Graphs and CCR algebras*, to appear in Indiana University Mathematics Journal.
- (3) *Model theory of operator algebras I: Stability*, (joint with Bradd Hart and David Sherman), submitted, July 2009.
- (4) *Nonseparable UHF algebras I: Dixmier's problem*, (joint with Takeshi Katsura), submitted, April 2009.
- (5) *The relative commutant of separable C^* -algebras of real rank zero*, Journal of Functional Analysis, 256 (2009), no. 11, 3841–3846
- (6) *The relative commutant of $L(H)$ in its ultrapower may or may not be trivial*, (with N.C. Phillips and J. Steprāns) accepted for publication in Math. Annalen.
- (7) *All automorphisms of the Calkin algebra are inner*, submitted to Annals of Mathematics, March 2007.
- (8) *Nonhomogeneity in products of $\beta\mathbb{N}$ -spaces*, Top. Appl. **155** (2008) 273–276.
- (9) *Extreme amenability of L_0 , a Ramsey theorem, and Lévy groups*. (with S. Solecki), Journal of Functional Analysis **255** (2008) 471–493.
- (10) *Maharam algebras and Cohen reals*, (with Boban Veličković), Proc. Amer. Math. Soc, **135** (2007) 2283–2290.
- (11) *Absoluteness for universally Baire sets and the uncountable I*, (with Paul B. Larson), Quaderni di Matematica **17**, (2006) Set Theory: Recent Trends and Applications, A. Andretta, ed., 47–92.
- (12) *Von Neumann's problem and large cardinals*, (with Boban Veličković), Bulletin of the London Math. Society **38** (2006) 907–912.
- (13) *A countable dense homogeneous set of size \aleph_1* , (with Michael Hrušák and Carlos Azarel Martínez Ranero), Fund. Math. **186** (2005), 71–77.
- (14) *Four and more*, (with J. Zapletal), Ann. Pure Appl. Logic **140** (2006), 3–39.
- (15) *Analytic Hausdorff gaps II: the density zero ideal*, Israel Journal of Mathematics **154** (2006), 235–246.
- (16) *Between Maharam's and von Neumann's problems*, (with Jindřich Zapletal), Mathematical Research Letters **11** (2004), no. 5–6, 673–684.

- (17) *Examples of ϵ -exhaustive submeasures*, *Fund. Math.* **181** (2004), 257–272.
- (18) *Borel subgroups of Polish groups*, (with S. Solecki), *Advances in Mathematics*, **199** (2006), 499–541.
- (19) *Is $\mathcal{P}(\omega)$ a subalgebra?*, (with A. Dow), *Fund. Math.*, **183** (2004), 91–108.
- (20) *Luzin gaps*, *Trans. Amer. Math. Soc.* **356** (2004), 2197–2239.
- (21) *Two $F_{\sigma\delta}$ ideals*, (with S. Solecki), *Proc. Amer. Math. Soc.*, **131** (2003), 1971–1975.
- (22) *How many Boolean algebras $P(\mathbb{N})/\mathcal{I}$ are there?*, *Illinois Journal of Mathematics*, **46** (2003) 999–1033.
- (23) *Partition theorems for layered partial semigroups*, (with N. Hindman and J. McLeod), *Journal of Combinatorial Theory, Ser. A*, **98** (2002) 268–311.
- (24) *Powers of \mathbb{N}^** , *Proc. Amer. Math. Soc.*, **130** (2002) 1243–1246.
- (25) *Dimension phenomena associated with $\beta\mathbb{N}$ spaces*, *Top. Appl.*, **125** (2002) 279–297.
- (26) *Functions essentially depending on at most one variable*, *Journal of Combinatorial Theory, Ser. A*, **94** (2001) 169–177.
- (27) *Basis problem for turbulent actions II: c_0 -equalities*, *Proceedings of The London Mathematical Society*, **82** (2001) 1–30.
- (28) *Basis problem for turbulent actions I: Tsirelson submeasures*, *Annals of Pure and Applied Logic*, **108** (2001) 189–203.
- (29) *Approximate homomorphisms II: Group homomorphisms*, *Combinatorica* **20** (2000) 47–60.
- (30) *Ideals induced by Tsirelson submeasures*, *Fund. Math.*, **159** (1999) 243–258.
- (31) *Approximate homomorphisms*, *Combinatorica*, **18** (1998), 335–348.
- (32) *Completely additive liftings*, *The Bulletin of Symbolic Logic*, **4**, (1998), 37–54.
- (33) *Semiselective coideals*, *Mathematika*, **45**, (1998), 79–103.
- (34) *OCA and towers in $\mathcal{P}(\mathbb{N})/fin$* , *Comm. Math. Univ. Carolinae*, **37** (1996), 861–866.
- (35) *Embedding partially ordered sets into ${}^\omega\omega$* , *Fund. Math.*, **151**, (1996), 53–95.
- (36) *A coherent family of partial functions on \mathbb{N}* , *Proc. Amer. Math. Soc.* **124**, (1996), 2845–2852.

INVITED BOOK CHAPTERS:

- (1) *Set theory and operator algebras*, (with E. Wofsey) *Appalachian Set Theory Workshop* (E. Schimmerling et al, eds), 40pp, to appear.
- (2) *Some problems about operator algebras with set-theoretic flavor*, *Appalachian Set Theory Workshop* (E. Schimmerling et al, eds), 40pp, to appear.
- (3) *The fourth head of $\beta\mathbb{N}$* , in ‘Open Problems in Topology II,’ E. Pearl, ed., Elsevier, (2007) 135–142.

PAPERS IN REFEREED CONFERENCE PROCEEDINGS:

- (1) *The extender algebra and Σ_1^2 -absoluteness*, submitted, August 2009.
- (2) *A dichotomy for the Mackey Borel structure*, submitted, August 2009
- (3) *Absoluteness for universally Baire sets and the uncountable II*, (with Richard Ketchersid, Paul B. Larson and Menachem Magidor), *Computational Prospects of Infinity, part II* (Chong, C. et al. eds.) (2008) World Scientific, 163–192.

- (4) *A proof of the Σ_1^2 absoluteness theorem*, Advances in Logic (S. Gao, S. Jackson and Y. Zhang, eds.), *Contemporary Mathematics*, **425** (2007) American Mathematical Society, RI., 9–22.
- (5) *Reductions between meager ideals*, Fund. Appl. Math. **11** (2005), 213–219.
- (6) *Analytic Hausdorff gaps*, In: Set Theory (Piscataway, NJ, 1999), *Dimacs Series*, **58**, (2002) 65–72. AMS.
- (7) *Rigidity conjectures*, In: Proceedings of Logic Colloquium 2000, R. Cori et al., editors. (2005), 252–271.
- (8) *Liftings of homomorphisms between quotient structures and finite combinatorics*, In: Logic Colloquium '98, S. Buss, et al., editors. A.K. Peters, Lecture notes in logic, **13**, (2000) 173–196.
- (9) *Cauchy nets and open colorings*, 50th anniversary of the Mathematical Institute, Serbian Academy of Sciences and Arts (Belgrade, 1996), Publications de l'Institut Mathématique, **64** (1998), 146–152.

PAPERS IN PREPARATION

- (1) Ultrapowers of operator algebras and stability II: Model theory, with Bradd Hart and David Sherman.
- (2) Nonseparable UHF algebras II: Classification, with Takeshi Katsura.
- (3) All automorphisms of all Calkin algebras, with Paul McKenney and Ernest Schimmerling.