

PUBLICATION LIST (Anar Dosi)

Research interests: Quantum information theory, noncommutative analysis, operator algebras, multi-variable operator theory, topological homology, noncommutative holomorphic functional calculus, noncommutative algebraic geometry

47. Dosi A. A., Noncommutative holomorphic functional calculus, affine and projective spaces from NC-complete algebras, **St. Petersburg Math. J.** **31:4** (2019), 48–113.

46. Dosi A. A., Quantum system structures of quantum spaces and entanglement breaking maps, **Sbornik Math.** **210** (7) (2019) 21-93.

45. Dosi A. A., Operator Hilbert systems,
Funct. Anal. Appl. **53** (2) (2019) 79–86.

44. Dosi A. A., Multinormed semifinite von Neumann algebras, unbounded operators and conditional expectations, **J. Math. Anal. Appl.** **466** (2018) 573-608.

43. Dosi A. A., Noncommutative localizations of Lie-complete rings,
Communications in Algebra **44** (2016) 4892–4944.

42. Dosi A. A., Noncommutative affine spaces and Lie-complete rings,
C. R. Acad. Sci. Paris, Ser I, **353** (2015) 149-153.

41. Dosi A.A. Functional calculus on noetherian schemes,
C. R. Acad. Sci. Paris, Ser I, **353** (2015) 57-61.

40. Dosi A. A., Injectivity in the quantum space framework,
Operators and matrices, **8** (4) (2014) 1013–1039.

39. Dosi A. A., A representation theorem for quantum systems,
Funct. Anal. and its Appl., **47** (3) (2013) 241-245.

38. Dosi A. A., Quantum cones and their duality,
Houston J. Math. **39** (3) (2013) (853-887).

37. Dosi A. A., Quantum systems and representation theorem,
Positivity. **17** (3) (2013) 841-861.

36. Dosi A. A., Multinormed W^* -algebras and unbounded operators,
Proc. Amer. Math. Soc. **140** (2012) 4187-4202.

35. Dosi A. A., Bipolar theorem for quantum cones,
Funct. Anal. and its Appl., **46** (3) (2012) 228-231.

34. Dosi A. A., Noncommutative Mackey theorem,
Intern. J. Math. **22** (4) (2011) 535-544.

- 33.** Dosi A. A., Local operator algebras, fractional positivity and quantum moment problem, **Trans. Amer. Math. Soc.** **363** (2011), 801-856
- 32.** Dosi A.A., Quotients of quantum bornological space, **Taiwanese J. Math.** **15** (3) (2011) 1287-1303.
- 31.** Dosi A. A., Formally radical functions in elements of a nilpotent Lie algebra and noncommutative localizations, **Algebra Colloquium** **17** (Spec 1) (2010) 749-788.
- 30.** Dosi A. A., Quantum duality, unbounded operators and inductive limits, **J. Mathematical Physics** **51** (6) (2010) 1-43.
- 29.** Dosi A. A., Taylor functional calculus for supernilpotent Lie algebra of operators, **J. Operator Theory** **63** (1) (2010) 101-126.
- 28.** Dosi A.A., Taylor spectrum and transversality for a Heisenberg algebra of operators, **Matem. Sbornik**, **201** (3) (2010) 39-62.
- 27.** Dosi A. A., Noncommutative holomorphic functions in elements of a Lie algebra and noncommutative localizations, **Izvestiya Math. RAN**, **73** (06) (2009) 77-100.
- 26.** Dosiev A. A., Local left invertibility for operator tuples and noncommutative localizations, **J. K-theory**, **4** (01) (2009) 163-191.
- 25.** Dosiev A.A., Perturbations of nonassociative Banach algebras, **Rocky Mountain J. Math.**, **39** (2) (2009) 509-526.
- 24.** Dosiev A.A., Frechet sheaves and Taylor spectrum for supernilpotent Lie algebra of operators, **Mediterr. J. Math.** **6** (2009) 181-201.
- 23.** Dosiev A. A., Regularities in noncommutative Banach algebras, **Integ. Eq. Oper. Th.**, **61** (3) (2008) 341-364.
- 22.** Dosiev A. A., Local operator spaces, unbounded operators and multinormed C^* -algebras, **J. Funct. Anal.**, **255** (7) (2008) 1724-1760.
- 21.** Dosiev A.A., Quantized moment problem, **C. R. Acad. Sci. Paris, Ser I**, **344** (10) (2007) 627-630.
- 20.** Dosiev A.A., The representation theorem for local operator spaces, **Funct. Anal. and its Appl.**, **41** (4) (2007) 306-310.
- 19.** Dosiev A.A., Quasispectra of solvable Lie algebra homomorphisms into Banach algebras, **Studia. Math.** **174** (1) (2006) 13-27.
- 18.** Dosiev A.A., Cartan-Slodkowski spectra, splitting elements and noncommutative spectral mapping theorems, **J. Funct. Anal.**, **230** (2) (2006) 446-493.

17. Dosiev A.A., Spectral mapping framework, Proceedings of the Conference on Topological Algebras, **Banach Center Publications**, **67 (2005) 161-169**.

16. Dosiev A.A., Cohomology of sheaves of Frechet algebras and spectral theory, **Funct. Anal. and its Appl.**, **39 (3) (2005) 225-228**.

15. Dosiev A.A., Algebras of power series in elements of a Lie algebra and Slodkowski spectra, **J. Math. Sciences (translated from: Zapiski POMI, St-Petersburg)**, **124 (2) (2004) 4886-4908**.

14. Dosiev A.A., Homological dimensions of the algebra formed by entire functions of elements of a nilpotent Lie algebra, **Funct. Anal. and its Appl.**, **37 (1) (2003) 61-64**.

13. Dosiev A.A., Spectra of infinite parametrized Banach complexes, **J. Operator Theory**, **48 (3) (2002) 585-614**.

12. Dosiev A.A., Ultraspectra of a representation of a Banach Lie algebra, **Funct. Anal. and its Appl.**, **35 (3) (2001) 226-229**.

11. Dosiev A.A., Holomorphic functions of a basis of a nilpotent Lie algebra, **Funct. Anal., and its Appl.** **34 (4) (2000) 302-304**.

National type papers:

10. Dosi A. A., Quantum cones and quantum balls, **Azerb. J. Math.** **8 (2) (2019) 142-151**.

9. Dosi A. A., A survey on multinormed von Neumann algebras, **Proc. Institute of Math. Mech. NASA** **43 (1) (2017) 3-67**.

8. Dosi A. A. A survey of spectra of parametrized Banach space complexes, **Azerb. J. Math.**, **1 (1) (2011) 3-56**.

7. Dosiev A.A., Note on algebras of power series in elements of a Lie algebra, **Trans. NAS Azerb.**, **12 (7) (2004) 39-42**.

6. Dosiev A.A., Projection property of spectra for solvable Lie algebra representations, **Trans. NAS Azerb.**, **23 (1) (2003) 27-32**.

5. Dosiev A.A., On fredholm pairs of operators, **Proc. IMM NAS Azerb.**, **13 (2000) 33-38**.

4. Dosiev A.A., Cartan type criterion for solvability of subalgebras of an associative Banach algebra, **Proc. IMM NAS Azerb.**, **10 (1999) 25-27**.

3. Dosiev A.A., Holomorphic functions on polydisk of Heisenberg algebra generators, **Trans. NAS Azerb.**, **19 (1999) 41-46**.

2. Dosiev A.A., On Arens-Michael hull of the universal enveloping algebra of a nilpotent Lie algebra, **Trans. NAS Azerb.**, **18 (1997) 87-98** (in russian).

1. Dosiev A.A., The Taylor joint spectrum of noncommuting variables, **Proc. IMM NAS Azerb.**, **5 (1996) 173-175** (in russian).