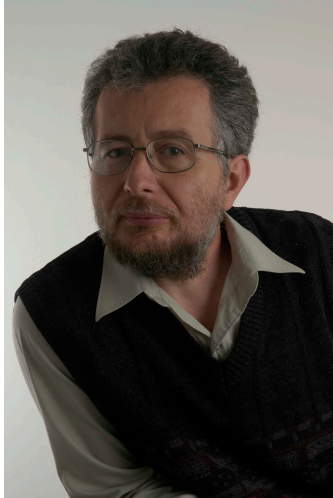# Aurelian Gheondea

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Fields of interest: Functional Analysis; Operator Theory, Quantum Operations; Systems Theory; Differential Operators.

More information:

- **Seminar**: Analysis.
- **Teaching**
  - **Functional Analysis** (MATH 414).
  - **Advanced Calculus** (MATH 213 and MATH 214).
  - **Senior Projects** (MATH 491 and MATH 492).
- **Recent Publications.**
- A. Gheondea, S. Gudder: Sequential product of quantum effects, *Proceedings of the American Mathematical Society,* **132**(2004), 503-512.

- P. Cojuhari, A. Gheondea, On lifting of operators to Hilbert spaces induced by positive selfadjoint operators, *J. Math. Anal. Appl.* **304** (2005), 584--598.
- A.Gheondea, S. Gudder, P. Jonas, On the infimum of quantum effects. *J. Math. Phys.* **46** (2005), no. 6, 062102, 11 pp.
- T. Constantinescu and A. Gheondea: On L. Schwartz's boundedness condition for kernels, *Positivity,* **10**(2006), no. 1, 65-86.

Accepted papers

T. Tudor and A. Gheondea: Pauli algebraic forms of normal and non-normal operators, *J. Opt. Soc. Amer. A* (to appear).

Preprints

P. Cojuhari and A. Gheondea: Krein spaces induced by symmetric operators

- **List of Publications.**
- A. Gheondea: On meromorphic functional calculus [Romanian], *Studii si Cercetari Matematice*, **33**(1981), 171-191.
- T. Constantinescu and A. Gheondea: Algebraic aspects of the functional calculus for meromorphic functions, *Revue Roumaine de Mathematiques Pures et Appliquees*, **27**(1982), 949-956.
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- T. Constantinescu and A. Gheondea: The negative signature of some Hermitian matrices, *Linera Algebra and its Applications*, **178**(1993), 178-42.
- A. Gheondea: Quasi-contractions in Krein spaces, in *Operator Theory: Advances and Applications*, Vol. 61, Birkhauser Verlag, Basel 1993, pp. 123-148.
- A. Gheondea: The spectral theory of selfadjoint operators in Krein spaces [Romanian], *Studii si Cercetari Matematice*, **45**(1993), 177-265.
- A. Gheondea: Techniques of geometry of Krein spaces in generalized interpolation theory, in *Challanges of a Generalized System Theory*, North-Holland, Amsterdam 1993, pp. 195-208.
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- A. Dijksma and A. Gheondea: On the signatures of selfadjoint pencils, in *Operator Theory: Advances and Applications*, Vol. 80, Birkhauser Verlag, Basel 1995.
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- P. Cojuhari, A. Gheondea, On lifting of operators to Hilbert spaces induced by positive selfadjoint operators, *J. Math. Anal. Appl.* **304** (2005), 584--598.
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- T. Tudor and A. Gheondea: Pauli algebraic forms of normal and non-normal operators, *J. Opt. Soc. Amer. A* **24** (2007), 204-210.

Accepted papers

P. Cojuhari and A. Gheondea: Krein spaces induced by symmetric operators *J. Operator Theory* (to appear)

Links to my other activities:

- **Journal of Operator Theory**
- **Zentralblatt MATH**