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Born in Recife, Brazil, 13 April 1960

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Education.

- Physics B.Sc, Federal University of Pernambuco (Recife), 1981.
- Mathematics M. Sc, Federal University of Pernambuco, 1983.
- Mathematics Ph.D, University of California at Berkeley, 1988. Thesis: Comparison Algebras with Periodic Symbols. Advisor: Heinz-Otto Cordes.

Positions.

- Federal University of Pernambuco, 1988-1992.
- University of São Paulo, since 1992.

Research Articles.

- *Boutet de Monvel's Calculus and Groupoids I* (with Johannes Aastrup, Bertrand Monthubert and Elmar Schrohe), to appear in the Journal of Noncommutative Geometry, <http://arxiv.org/abs/math.KT/0611336>.
- *Cordes characterization for pseudodifferential operators with symbols valued on a noncommutative C^* -algebra* (with Marcela I. Merklen), *Comptes Rendus Mathématiques de l'Académie des Sciences (Canada)* **31-1**, 24-32, 2009.
- *Pseudodifferential operators with C^* -algebra-valued-symbol: Abstract characterizations* (with Marcela I. Merklen), *Proceedings of the American Mathematical Society* **136-1**, 219-227, 2008.
- *K-Theory of pseudodifferential operators with semi-periodic symbols* (with Cíntia C. Silva), *K-Theory* **37-3**, 235-248, 2006.
- *A K-Theoretic Proof of Boutet de Monvel's Index Theorem for Boundary Value Problems* (with Thomas Schick and Elmar Schrohe), *Journal für die reine und angewandte Mathematik (Crelle's Journal)* **599**, 217-233, 2006.
- *Norm closure of classical pseudodifferential operators does not contain Hörmander's class*; in: "Geometric analysis of PDE and several complex variables" (S. Chanillo et al., eds), *Contemporary Mathematics* **368**, pp 329-336, American Mathematical Society, Providence, 2005.
- *C^* -Structure and K-Theory of Boutet de Monvel's Algebra* (with Ryszard Nest and Elmar Schrohe), *Journal für die reine und angewandte Mathematik (Crelle's Journal)* **561**, 145-175, 2003.
- *K-Theory of Boutet de Monvel's Algebra* (with Ryszard Nest and Elmar Schrohe); in: "Noncommutative Geometry and Quantum Groups" (P. Hajac, W. Pusz, eds), *Banach Center Publications* **61**, pp 149-156, Polish Academy of Sciences, Warsaw, 2003.
- *Harnack Inequality for a class of degenerate elliptic operators* (with José D. Fernandes and Jorge Groisman), *Zeitschrift für Analysis und ihre Anwendungen* **22-1**, 129-146, 2003.
- *On a conjectured noncommutative Beals-Cordes-type characterization* (with Marcela I. Merklen), *Proceedings of the American Mathematical Society* **130-7**, 1997-2000, 2002.

- *Darcy's law for a heterogeneous porous medium* (with Francisco Moura-Neto), *Journal of Porous Media* **4**-2, 165-178, 2001.
- *Smooth Operators for the Regular Representation on Homogeneous Spaces*, *Studia Mathematica* **142**-2, 149-157, 2000.
- *Smooth Operators for the Action of $SO(3)$ on $L^2(\mathbf{S}^2)$* (with H. O. Cordes), *Integral Equations and Operator Theory*, **28**-3, 251-260, 1997.
- *Characterizations of pseudodifferential operators on the circle*, *Proceedings of the American Mathematical Society* **125**-5, 1407-1412, 1997.
- *A comparison algebra on a cylinder with semi-periodic multiplications*, *Pacific Journal of Mathematics*, **146**-2, 281-304, 1990.
- *An algebra of singular integral operators with kernels of bounded oscillation and application to periodic differential operators* (with H. O. Cordes), *Journal of Differential Equations*, **75**-2, 216-238, 1988.

Book.

- *Mecânica dos Fluidos e Equações Diferenciais* (with Francisco Moura-Neto), Instituto de Matemática Pura e Aplicada, Rio de Janeiro, 1991.

Selected Talks.

- *K-Theory of pseudodifferential operators with semiperiodic symbols on a cylinder*, C^* -algebras and elliptic theory III, Będlewo, 2009.
- *K-Theoretic proof of Boutet de Monvel's index theorem*, Brazilian Conference on Operator Algebras, Florianópolis, 2006.
- *K-Theory of Pseudodifferential Operators with semiperiodic symbols*, 2nd Joint Meeting of American, German and Austrian Societies of Mathematics, Mainz, Alemanha, 2005.
- *A K-Theoretic Proof of Boutet de Monvel's index theorem*, French-Canadian Congress of Mathematics, Toulouse, 2004
- *Boundary principal symbols in K-theoretic computations*, Workshop "C*-Algebras and elliptic theory", Banach Centre, Będlewo, 2004.
- *K-Theory of Boutet de Monvel's algebra*, School/Conference on Noncommutative Geometry and Quantum Groups, Banach Centre, Warsaw, 2001.
- *C*-Structure of Boutet de Monvel's algebra and applications to K-theory*, Workshop "Ellipticity and Asymptotics in Spaces with Singularities", Banach Centre, Będlewo, 2001.
- *Smooth operators under the action of some compact Lie groups*, Workshop "Pseudo-differential Operators and Microlocal Analysis", Oberwolfach, 1997.
- *Mathematics Colloquium*, *Universidad de la República*, Montevideo, 1997.
- *A characterization of smooth operators for the regular representation of the circle*, *Functional Analysis Colloquium*, Berkeley, 1996.
- *A comparison algebra on a cylinder with semi-periodic multiplications*, Workshop "Topics in Pseudodifferential Operators", Oberwolfach, 1989,
- *An index formula for differential operators with semi-periodic coefficients*, Workshop "Elliptische Operatoren auf singulären und nichtkompakten Mannigfaltigkeiten", Oberwolfach, 1987.

PhD Students.

- Patrícia Hess, 2008. Thesis: “K-teoria de operadores pseudodiferenciais com símbolos semiperiódicos no cilindro”.
- David Pires Dias, 2008. Thesis: “O caráter de Chern-Connes para C^* -sistemas dinâmicos calculado em algumas álgebras de operadores pseudodiferenciais”.
- Cíntia Cristina da Silva, 2005. Thesis: “K-teoria de operadores pseudodiferenciais na reta com símbolos semiperiódicos”.
- Marcela Irene Merklen de Olivera, 2002. Thesis: “Resultados motivados por uma caracterização de operadores pseudodiferenciais conjecturada por Rieffel”.