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Michel L Lapidus* (lapidus@math.ucr.edu), University of California, Department of Mathematics, 900 University Ave., Surge Bdg., Riverside, CA 92521-0135. *Results and Open Problems on Feynman's Operational Calculus.*

We shall survey several results and propose several open problems connected with Feynman's operational calculus for noncommuting operators. Some of this work is closely connected with aspects of a book in preparation jointly with Gerald Johnson and Lance Nielsen and entitled "Feynman's Operational Calculus and Beyond: Noncommutativity and Time-Ordering", as well as to aspects of an earlier book by Gerald Johnson and the presenter and entitled "The Feynman Integral and Feynman's Operational Calculus" (Oxford University Press, Oxford Mathematical Monographs, 2000; corrected printing and paperback edition, 2002). (Received September 21, 2012)