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Peter A. Loeb (3 July 1937 – 20 November 2024)

EDITORS, *Journal of Logic & Analysis*

The Editorial Board is sad to learn of the recent passing of Peter Albert Loeb, who was a founding editor of the Journal of Logic & Analysis. Loeb's mathematical interests ranged widely, including potential theory [1, 4, 5, 7, 8, 9, 18, 20, 23, 25, 26, 29, 31, 35, 45, 46, 47, 49, 50, 53, 57, 63, 68, 75], measure theory [11, 12, 13, 14, 16, 17, 22, 40, 42, 48, 55, 56, 59, 60, 61, 62, 64, 65, 66, 67], probability [24, 27, 32, 37, 58], functional analysis [15, 30, 33, 36, 51], topology [2, 6, 10, 38, 43, 44, 52, 70, 77], applications such as mathematical economics [19] and mathematical physics [21, 28]. He was the author of several graduate texts in analysis and nonstandard analysis [34, 54, 74], and he had an ongoing interest in the history and pedagogy of mathematics [39, 69, 76]

However, it is his eponymous contribution to measure theory that will likely prove to be his most enduring legacy. The Loeb measure construction, which leverages a fundamental property of nonstandard models ($\aleph_1$–saturation) to satisfy a classical hypothesis (the Carathéodory condition), exemplifies the aim of the *Journal of Logic & Analysis*, to promote interaction between mathematical logic and other areas of mathematics. The Loeb Measure has found myriad applications across analysis and probability theory, to mathematical physics and mathematical economics, to additive number theory and combinatorics, and even back to logic.

Loeb joined the Mathematics Department of the University of Illinois, Urbana-Champaign, in 1968 and remained an active faculty member there to the end of his life. He belonged to the research groups in analysis, probability, and logic, and supervised 6 PhD theses: William Paul Wake, 1972; Yeneng Sun, 1989; Jesus Aldaz, 1991; Beate Zimmer, 1994; Vladimir Troitsky, 1999; and Jesse Miller, 2011.

Peter Loeb was a colleague, friend, and mentor to many on the Editorial Board, and we would like to take this opportunity to acknowledge his contribution to the field in general, and this journal in particular.

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