

# From Fuzzy Logic to Fuzzy Mathematics: Methodological Aspects

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Formal mathematical fuzzy logic, as opposed to applied fuzzy logic commonly used for the last forty years, has been developed mainly since 1990's. One of the initial reasons for its development was the pursuit of formal reconstruction of fuzzy methods in applications. The milestone of this endeavour in logic is Hájek's 1998 monograph, preceded and followed by works of many other outstanding mathematicians and logicians. By now, these efforts in the area of fuzzy logic are, from this particular point of view, nearly completed and have reached the point in which formal fuzzy logic can serve as a starting point of the formalization of further parts of fuzzy mathematics.

The aim of this talk is to explicitly formulate certain methodological guidelines for such an enterprise.