Multidimensional nonlinear pseudo-differential equation with p-adic spatial variables

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ABSTRACT

We develop a multi-dimensional generalization of the theory of the p-adic porous medium type equation [1]. We use substantially the class of operators studied in Chapter 2 of [2].

References

[1] A. Khrennikov and A. N. Kochubei. p-Adic analogue of the porous medium equation. J. Fourier Anal Appl. 24 (2018), 1401–1424.

[2] W. Zuniga-Galindo. Pseudo-Differential equations over Non-Archimedean Spaces. Lect. Notes Math. 2174 (2016).