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Yunyun Esther Yang* (yyang18@math.lsu.edu), Department of Mathematics, Louisiana State University, Baton Rouge, LA 70803. *Distributions in Spaces with Thick Points*.

I will introduce our recent work in a theory of distributions where one special point, a thick point, is present. The theory of thick distributions was initially introduced to deal with the occurrence of a distributional singularity. We used asymptotic expansions to define a new class of test functions. I will present our construction of the thick test function space and the thick distribution space; the study of several operations on these distributions; several important examples. This is a joint work with Professor Ricardo Estrada.

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