## A taste of microlocal analysis on supermanifolds

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**Abstract** In this talk we discuss the foundations for microlocal analysis on supermanifolds. Making use of pseudodifferential operators on supermanifolds as introduced by Rempel and Schmitt, we define a suitable notion of super wavefront set for superdistributions which generalizes Dencker's polarization sets for vector-valued distributions to supergeometry. In particular, our super wavefront sets detect polarization information of the singularities of superdistributions. We prove a refined pullback theorem for superdistributions along supermanifold morphisms, which as a special case establishes criteria when two superdistributions may be multiplied. As an application of our framework, we study the singularities of distributional solutions of a supersymmetric field theory.