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*Asymptotic Completeness and N-Particle Scattering in Wedge-local QFT*

I will outline my recent construction of scattering states with arbitrarily large number of particles in the general operator-algebraic setting of massive wedge-local quantum field theory. In this context wedge-geometrical obstructions invalidate conventional Haag-Ruelle arguments beyond the two-particle case. It will be explained how such limitations are overcome in my work via wedge-duality arguments. Recently constructed wedge-local models exhibiting non-trivial scattering on four-dimensional Minkowski space-time (Grosse-Lechner, Buchholz-Lechner-Summers) can be investigated with my construction regarding particle-phenomenological features such as asymptotic completeness. (partially based on arxiv:1711.02569, accepted in CMP)