

The mean-field limit for a regularized relativistic Vlasov-Maxwell dynamics

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In 1977, Braun and Hepp established the mean-field limit for a system of particles leading to a regularized variant of the Vlasov-Poisson system, where the Coulomb potential is replaced with a smooth kernel. Their result was later strengthened by Dobrushin, who estimated the rate of convergence in that limit. An analogue of these results for the relativistic Vlasov-Maxwell system will be presented.