On Infinite Classical Coulomb Configurations and Their Potential

lundi 26 juin 2023 09:00 (45 minutes)

I will discuss the classical infinite Coulomb gas and its extension to Riesz interaction potentials $|x|^{-s}$. I will particularly focus on the problem of defining infinite equilibrium states and their potential. This has caused a lot of confusion in the literature, even in the simplest case of periodic lattices. The general case is in fact largely open. Based on the review paper Coulomb and Riesz gases: The known and the unknown, J. Math. Phys., 2022.

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