

# On a quasilinear mean field equation with an exponential nonlinearity

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We will discuss a mean field equation involving the  $N$ -Laplace operator and an exponential nonlinearity in dimension  $N \geq 2$  on bounded domains with homogeneous Dirichlet boundary condition. A quantization property is derived in the non-compact case by a detailed asymptotic analysis, yielding to the compactness of the solutions set in the so-called non-resonant regime. In such a regime, we will also discuss an existence result by a variational approach.