

Vlasov-Fokker-Planck description of the magneto-optical trap

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The magneto-optical trap (MOT) is the primary tool to cool atoms. The development of this technique led to spectacular breakthroughs in experimental quantum physics, such as optical lattices, cold molecules, or Bose-Einstein condensates. But the MOT is a complex object, as spatio-temporal instabilities of this cloud are commonly observed. Several models with different approaches

