

Abstract Submitted
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Making BEC for study Quantum physics by modulating the Magnetic potential JINAH PARK, DAHYUN YUM, WONHO JHE, Department of Physics and Astronomy, Seoul National University — The achievement of Bose Einstein Condensation (BEC) has opened a new chapter in atomic physics. With BEC in dilute atomic gases, quantum physics, solid state physics modeling and many physical phenomena, which has been hard to treat, could be studied beyond the research on BEC itself. In this sense, BEC in ultracold weakly interacting gases has been a very important meaning in recent years. Until now, many experimental results related with thermal atoms in the modulating potential have been carried out. It is no doubt that it is very interesting subject to study quantum mechanical phenomena in various potential configurations. We have been experimenting with the neutral rubidium 87 atoms for making BEC. Our experimental setup to obtain BEC is consisted of double Magneto-Optical Trap (MOT) system, Time Orbiting Potential (TOP) magnetic trap and evaporative cooling technique using rf-knife edge which is typical BEC setup. Here our experimental results are reported.

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