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## **Formation Mechanism of Galactic Center Molecular Loops in Multi-Phase Clumpy Interstellar Medium**

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Huge molecular loops are found in Galactic central region (Fukui et al. 2006). The scale of molecular loops are about few hundreds parsec in height and length. At the foot points of molecular loops, strong CO emission and large velocity dispersions are observed. These features indicate that molecular gas slide down along undulating magnetic field lines. Numerical simulations of Parker instability can explain the velocity profile along the molecular loop. However, it is not easy to uplift dense molecular gas from the equatorial region. Here we consider the possibility that dense gas clouds moving in the interstellar medium trigger the Parker instability. We carried out MHD simulations taking into account the heating and cooling function (Inoue et al. 2006) to deal with thermal processes in multi-phase interstellar medium. We found that Parker instability triggered by the upward motion of molecular clouds can form molecular loops and reproduce the velocity distribution along the molecular loops.