A07a **Truncated Core Mass Function with Cloud-cloud Collision in the Central Molecular Zone**

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The Central Molecular Zone (CMZ) is the counterpart of the central molecular cloud condensation often observed in nearby spiral galaxies. There are young and highly luminous star clusters in the CMZ, Arches cluster, Quintuplet cluster, Central cluster, etc.. However, it is hard to know observationally how the cradle molecular clouds produce such massive clusters because these clusters have already lost the surrounding molecular materials. Meanwhile, the 50 km s^{-1} molecular cloud is a most conspicuous molecular cloud in the CMZ and harbors an on-going star-forming site, which can be spatially resolved by radio observations. We found a half-circle feature with an emission line ratio of T(SiO2-1)/T($H^{13}CO^+$1-0)$\sim 6-8$ in the 50 km s^{-1} cloud using the Nobeyama 45-m telescope. The high ratio indicates that the feature is made of shocked molecular gas. This feature is also identified as a half-circle feature in the position-velocity diagram. A convincing hypothesis of the origin is that a cloud-cloud collision made the feature. This has been reported in the previous ASJ annual meeting (March 2014). We re-analyzed the CS $J = 1 - 0$ emission line data of the 50 km s^{-1} cloud using Nobeyama Millimeter Array to explore how the star formation is affected by the cloud-cloud collision. We made a core mass function (CMF) of the molecular cloud cores containing in the feature with new estimations of the excitation temperature and optical thickness of the CS emission line. The CMF has a flat slope and is probably truncated at $\sim 300 M_\odot$. This may a sign to make a top-heavy CMF with cloud-cloud collision.