times larger than in optical. However, the bright optical nebula would correspond to a MC swept up by the SNR, and consequently the interaction SNR-MC is limited to the central portion of the SNR.

We aimed to study the overall structure of N63A, using near-IR imaging and spectroscopic observations to obtain the physical parameters of the atomic shocks, and also to understand how the SNR- MC interaction works and reveal the structure of the shocked cloud as well as the consequences of the impact of the SNR shock on the MC, comparing information obtained in different wavelengths.

[포 IM-04] On the claimed X-shaped structure in the Milky Way bulge

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A number of recent studies have claimed that the double red clump observed in the Milky Way bulge is a consequence of an X-shaped structure. In particular, Ness & Lang (2016) report a direct detection of a faint X-shaped structure in the bulge from the residual map of the Wide-Field Infrared Survey Explorer (WISE) image. Here we show, however, that their result is seriously affected by a bulge model subtracted from the original image. When a boxy bulge model is subtracted, instead of a simple exponential bulge model as has been done by Ness & Lang, we find that most of the X-shaped structure in the residuals disappears. Furthermore, even if real, the stellar density in the claimed X-shaped structure appears to be too low to be observed as a strong double red clump at $l = 0^\circ$

[포 IM-05] Density-Magnetic Field correlation in MHD turbulence driven by forcing with different correlation time

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We study the effect of driving scheme on the density-magnetic field correlation. We numerically investigate how the correlation time of driving affects the correlation between density and magnetic field. We performed MHD turbulence simulation using two different driving schemes – a finite-correlated driving and a delta-correlated driving. In the former, the forcing vectors change continuously with a correlation time comparable to the large-eddy turnover time. In the latter, the direction and amplitude of driving changes in a very short time scale.

[포 IM-06] Multiwavelength Millimeter Observations of Dense Cores in the L1641 Cloud

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The L1641 cloud in Orion is an active site of star formation. We mapped a square region of 60 arcmin by 60 arcmin in the continuum emission from 0.89 mm to 2.0 mm wavelength using MUSIC mounted on the Caltech Submillimeter Observatory 10.4 m telescope. Eight sources were detected in at least two wavelength bands, and all the detected emission comes from thermal dust continuum radiation of dense cloud cores. Their spectral energy distributions were characterized. The dust emissivity spectral index is beta = 1.3 on average, within the range of typical cores in nearby star-forming regions. Two cores, V380 Ori NE and HH 34 MMS, have unusually low emissivity index of beta = 0.3. These cores may contain millimeter-sized dust grains, which suggests that the lifetime of some dense cores can be much longer than the free-fall timescale.

[포 IM-07] Different chemical and dynamical environments in two massive star forming regions, G19.61-0.23 and G75.78+0.34

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