

アルマ干渉計を用いた海王星成層圏HCN($J = 4-3$)観測

The Spatially-resolved HCN($J = 4-3$) Interferometric Observation on Neptune's Stratosphere with ALMA Array

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ALMA array is a powerful tool to illustrate both the photochemistry and dynamics of gas giants' stratosphere thanks to its high spatial resolution and sensitivity. We have constructed the spatially-resolved HCN($J=4-3$) map of Neptune with archived ALMA data obtained during Cycle-0 season. From the doppler-shift analysis, stratospheric dynamics of Neptune's stratosphere showing the spatial difference is illustrated clearly. In this presentation, obtained result and possible driving mechanism of the dynamics will be discussed.

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