HIGH RESOLUTION SPECTROSCOPY OF Ar-CH_4 IN THE 7 μ REGION

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The absorption spectrum of the Ar-CH_4 van der Waals complexes was measured in the 7 μ region. The complexes were produced in a pulsed slit supersonic jet and detected by a tunable diode laser spectrometer with 40 MHz spectral resolution. The strongest absorption features of the Ar-CH_4 were observed in the spectral region 1310.5–1311.1 cm^{-1} near the $R(0)$ line of the ν_4 fundamental band of the methane monomer. The observed transitions are related to the $j = 1 \leftarrow 0$ transition of the CH_4 in the complex. Analysis of the data is in progress, and the results of the analysis will be presented at the conference.