

THE LABORATORY ROTATIONAL SPECTRUM OF *ISO*-PROPYL CYANIDE AND AN ASTRONOMICAL SEARCH IN SAGITTARIUS B2(N)

HOLGER S. P. MÜLLER, *I. Physikalisches Institut, Universität zu Köln, 50937 Köln; and Max-Planck-Institut für Radioastronomie, 53121 Bonn, Germany*; A. COUTENS, A. WALTERS, *CESR, Université de Toulouse (UPS), and CNRS, 31028 Toulouse, France*; J.-U. GRABOW, *Institut für Physikalische Chemie und Elektrochemie, Lehrgebiet A, Universität Hannover, 30167 Hannover, Germany*; A. BELLOCHE, K. M. MENTEN, *Max-Planck-Institut für Radioastronomie, 53121 Bonn, Germany*; S. SCHLEMMER, *I. Physikalisches Institut, Universität zu Köln, 50937 Köln, Germany*.

We have carried out a molecular line survey of Sagittarius B2(N) in the 3 mm region with selected recordings at 2 and 1.3 mm to probe the chemical complexity in massive star-forming regions. Noteworthy results include the detection of aminoacetonitrile,^a a possible precursor of the aminoacid glycine, the detection of ¹³C isotopologs of vinyl cyanide,^b and the detection of ethyl formate as well as *normal*-propyl cyanide.^c The heavy atoms in the latter molecule form a chain. An isomer with a branched structure, *iso*-propyl cyanide, also exists, but its rotational spectrum has only been recorded in few transitions up to 40 GHz.^{d,e} Therefore, laboratory measurements were extended. The molecule is rather asymmetric ($\kappa = -0.5766$) with a strong *a*-dipole moment component of 4.05 (2) D and a still sizable *c*-component of 1.4 (2) D.^e Measurements in Köln were carried out in selected regions between 40 and 600 GHz. Since the *c*-type transitions appeared to be weaker than predicted additional Stark (and also zero-field) measurements have been carried out in Hannover between 6 and 20 GHz. We will present results of these laboratory spectroscopic investigations as well as the outcome of a search for the molecule in our Sgr B2(N) line survey.

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