LINE POSITIONS AND INTENSITIES FOR THE ν_3 BAND OF 5 ISOTOPOLOGUES OF GERMANE FOR PLANETARY APPLICATIONS

VINCENT BOUDON, TIGRAN GRIGORYAN, FLORIAN PHILIPOT, CYRIL RICHARD, *Laboratoire ICB, CNRS/Université de Bourgogne, DIJON, France*; F. KWABIA TCHANA, *LISA, CNRS, Universités Paris Est Créteil et Paris Diderot, Créteil, France*; LAURENT MANCERON, *Synchrotron SOLEIL, CNRS-MONARIS UMR 8233 and Beamline AILES, Saint Aubin, France*; ATHENA RIZOPOULOS, JEAN VANDER AUWERA, *Service de Chimie Quantique et Photophysique, Université Libre de Bruxelles, Brussels, Belgium*; THÉRÈSE ENCRENAZ, *LESIA, Observatoire de Paris / CNRS / UPMC, Meudon, France*.

Germane (GeH_4) is present in the atmospheres of the giant planets Jupiter and Saturn. The ongoing NASA mission Juno has renewed interest in its spectroscopy. The accurate modeling of which is essential for the retrieval of other tropospheric species. We present here the first complete analysis and modeling of line positions and intensities in the strongly absorbing ν_1/ν_3 stretching dyad region near 2100 cm^{-1}, for all five germane isotopologues in natural abundance[a]. New infrared spectra were recorded, absolute intensities were extracted through a careful procedure and modeled thanks to the formalism and programs developed in Dijon. A database of calculated germane lines, GeCaSDa, is available online through the *Virtual Atomic and Molecular Data Centre* (VAMDC) portal (`http://portal.vamdc.org`) and at `http://vamdc.icb.cnrs.fr/PHP/gecasda.php`. GeH_4 will integrate the HITRAN database as molecule number 50.

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