

ROTATIONAL AND HYPERFINE STRUCTURE IN THE $\tilde{B} - \tilde{X}$ TRANSITION OF NIOBIUM METHYLIDYNE, NbCH

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High resolution spectra have been taken for some of the components of the perturbed (0,0) band of the $\tilde{B}^3\Delta_1 - \tilde{X}^3\Delta_1$ system of NbCH near 600 nm. Extensive Nb hyperfine structure ($I = 9/2$) is found in all the rotational lines, consistent with the ground state electron configuration $(5s\sigma)^1 (4d\delta)^1$. Experiments with NbCD are planned, and it is hoped to report the hyperfine constants and the molecular structure at the meeting.