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HIGH VELOCITY OH NEAR YOUNG STELLAR OBJECTS: L1551

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ABSTRACT. We report the detection of OH absorption at high velocities in the bipolar outflow associated with the star formation region L1551. The OH absorption shows the same anisotropic angular distribution as the red shifted and blueshifted CO emission. The OH transitions are markedly subthermal ($T_{ex} \leq 3.8$ K), since the radiation that is being absorbed is a background continuum constituted by the cosmic component plus a small galactic contribution. The absorbing OH appears to trace the part of the bipolar outflow with the highest velocity and lowest density.

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