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Electronic Structure of $LaTe_2$ DANIEL GARCIA, GEY-HONG GWEON, Department of Physics, University of California, Berkeley, SHUYUN ZHOU, Department of Physics, University of California, Berkeley; Materials Sciences Division, Lawrence Berkeley National Laboratory, Berkeley, JEFF GRAF, Materials Sciences Division, Lawrence Berkeley National Laboratory, Berkeley, CHRIS JOZWIAK, Department of Physics, University of California, Berkeley, M.H. JUNG, National Research Laboratory for Material Science, KBSI, Y.S. KWON, Department of Physics, Sung Kyun Kwan University, Suwon , ALESSANDRA LANZARA, Department of Physics, University of California, Berkeley; Materials Sciences Division, Lawrence Berkeley National Laboratory, Berkeley — Current work on the charge density wave system $LaTe_2$ indicates the existence of near Fermi energy gapping due to $\mathbf{q}_{CDW}=\mathbf{a}^*/2$ and $\mathbf{b}^*/2$. We find this band gapping to be weaker than originally thought, particularly for the near Γ point contour. In addition, we find evidence of gap anisotropy which maintains the expected four fold symmetry of the crystal. Finally, we observe evidence of non-negligible kz dependence, originally considered minor. This appears to alter the CDW nesting as well as the gap anisotropy and has considerable importance to future studies of Rare-Earth Dichalcogenides.

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