The Unusual Case of S0 Galaxy NGC1266

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NGC 1266 is an S0 galaxy that was observed in multiple wavelengths as part of the Atlas3d effort which remarkably hosts $2 \times 10^9$ solar masses of molecular gas and has a spectrum that exhibits extended wings with full-width zero intensity of 800 km s$^{-1}$. CARMA observations using PACS have shed further light on this galaxy and revealed that the bulk of the gas is concentrated within 100 pc of the nucleus. Combined with the presence of an AGN and molecular gas outflowing faster than $v_{\text{esc}}$, this galaxy is an excellent candidate for AGN feedback. If so, it is the first example of molecular feedback into the IGM.