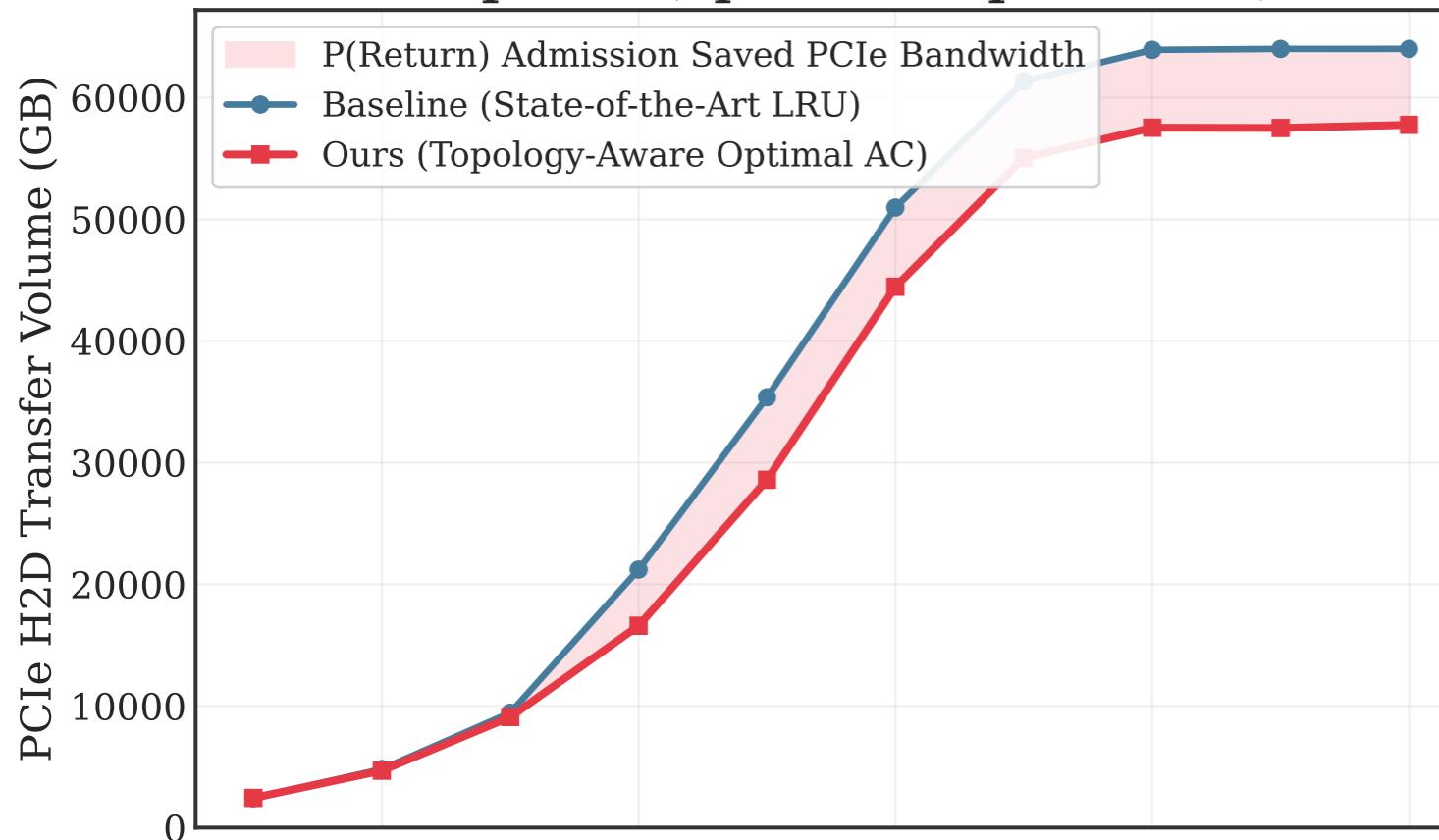
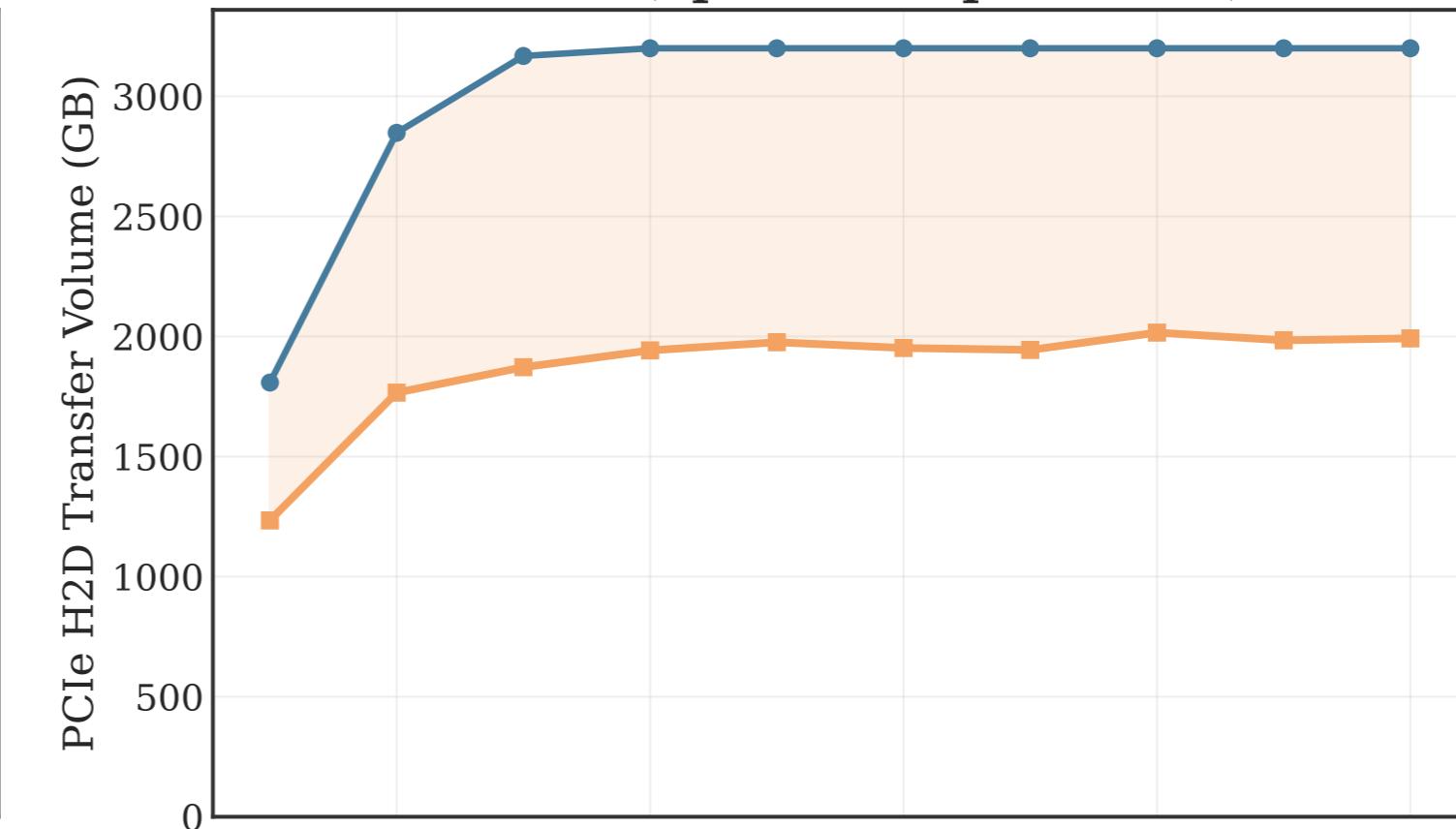


Phase Transitions in MoE Inference: Spectral Gap Regime vs. PCIe Bandwidth Collapse

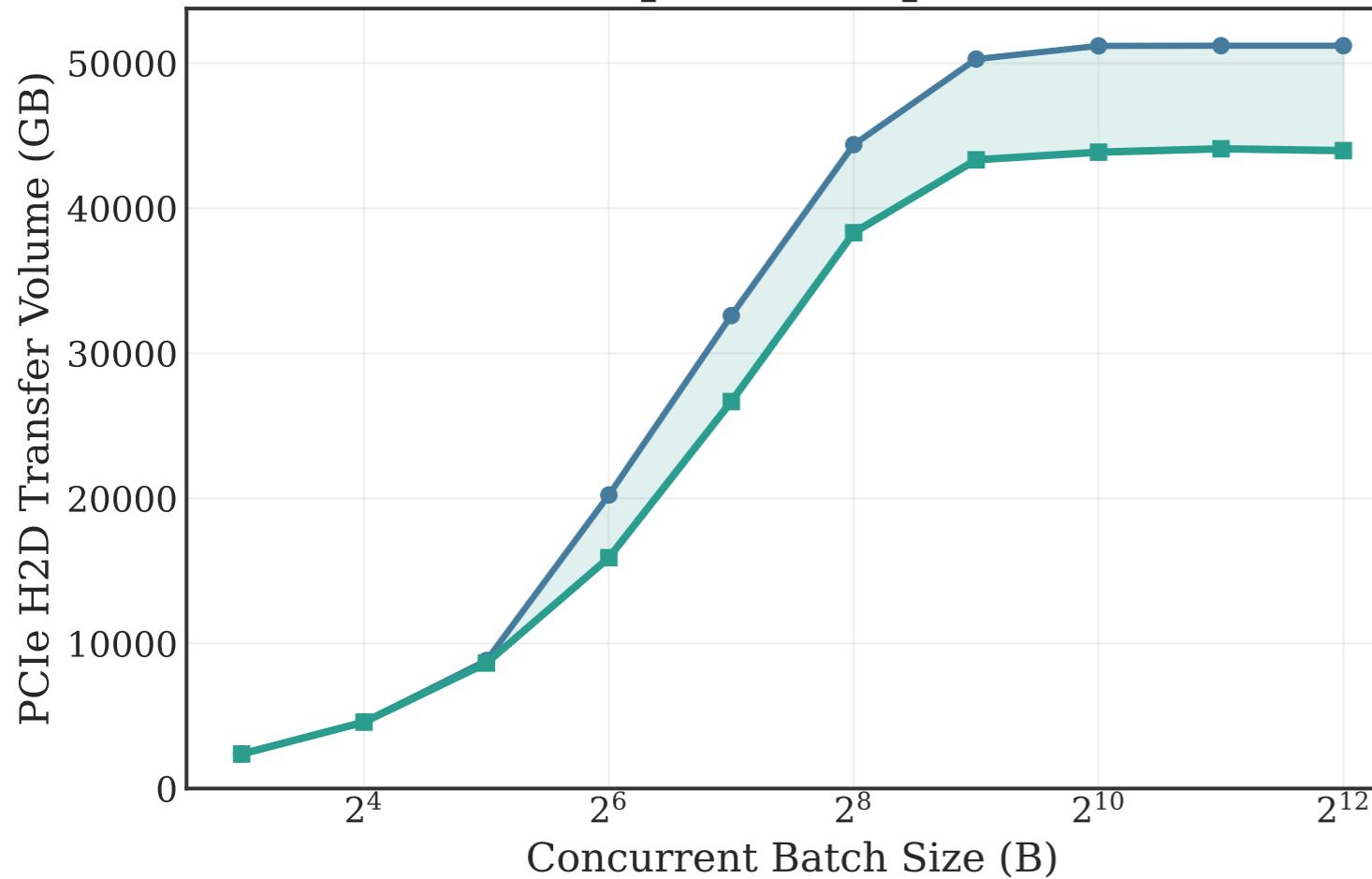
DeepSeek (Spectral Gap $\delta = 0.925$)



Mixtral (Spectral Gap $\delta = 0.858$)



Switch (Spectral Gap $\delta = 0.583$)



Qwen (Spectral Gap $\delta = 0.497$)

