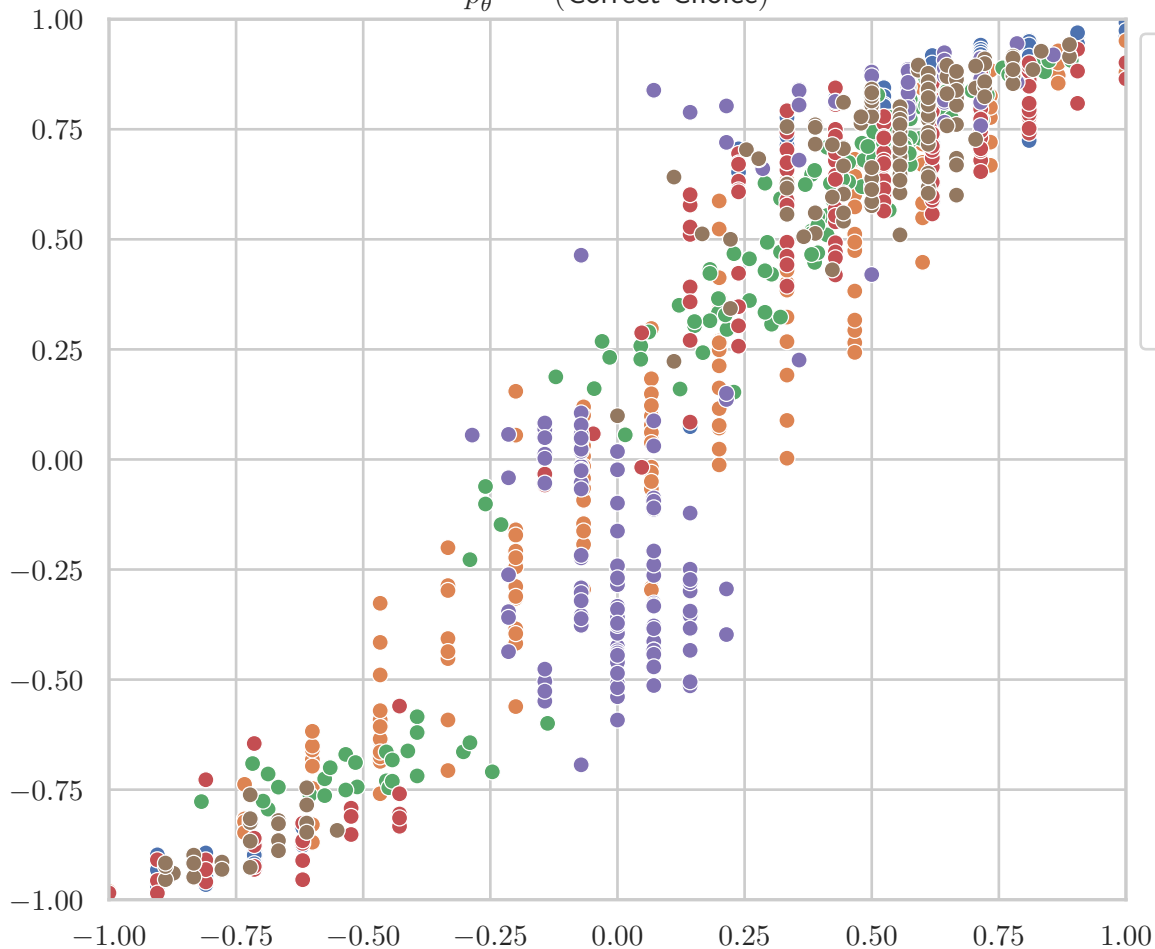


MMLU Astronomy  
 $p_{\theta}^{\text{Choices}}(\text{Correct Choice})$

Pearson Correlation  
Between FLOPs and Scores (Per Sample)



Model Family

- Cerebras (Param. and Data Scaling)
- INCITE 7B Param. (Data Scaling)
- LLM360 Amber 7B Tokens (Param Scaling)
- OLMo 7B Param. (Data Scaling)
- Pythia 12B Param. (Data Scaling)
- Pythia 300B Tokens (Param. Scaling)

Kendall Correlation  
Between FLOPs and Scores (Per Sample)