
Longitudinal Model

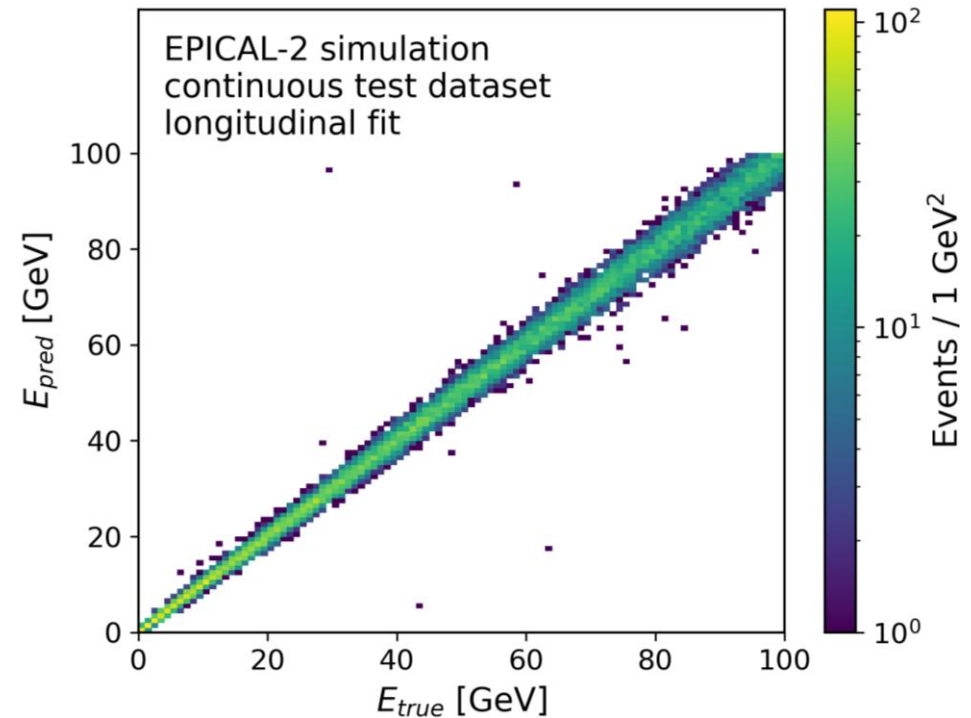
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Performance on continuous energies

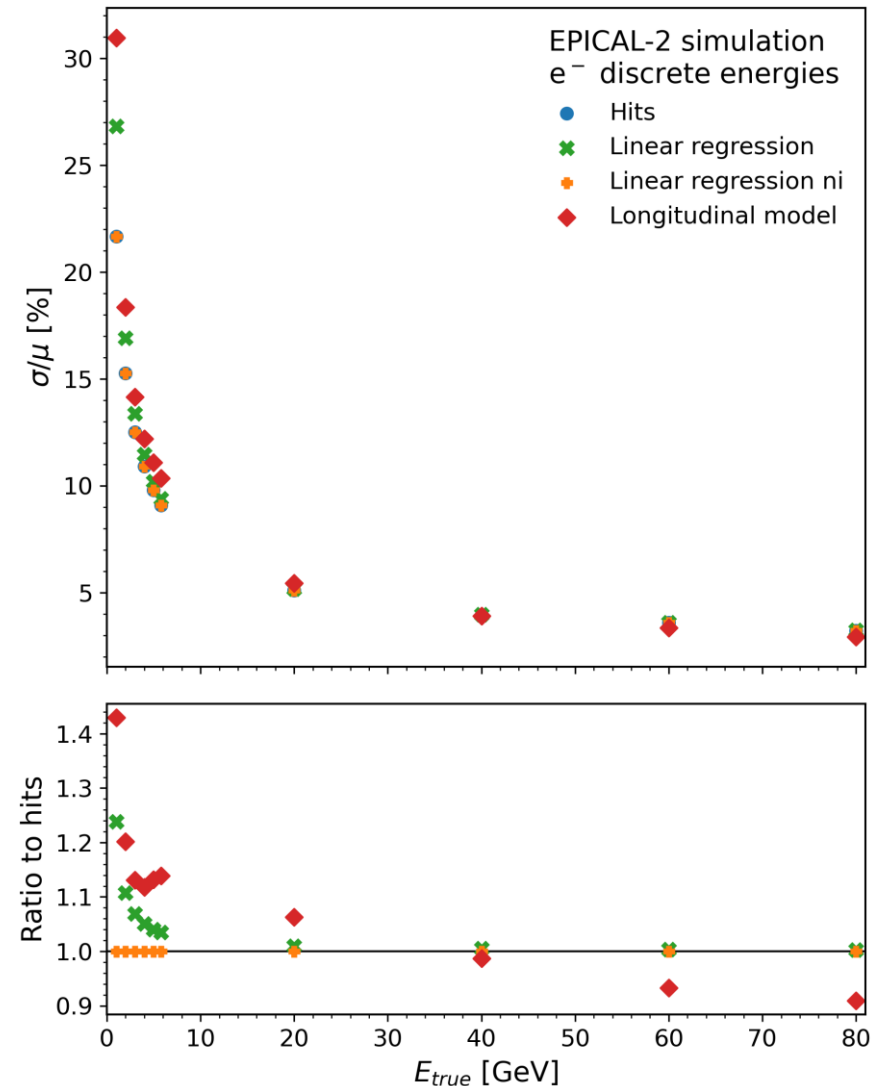
- Longitudinal model uses hits per layer
- Linear regression on number of hits
- Test models on part of dataset, not used during training



Model	MSE	MAE	MAPE	R2-Score
Lin reg intercept	4.8966	1.4682	4.199	0.9949
Lin reg no intercept	4.9508	1.4863	4.1419	0.9939
Longitudinal	4.1435	1.3884	3.9694	0.9949

Performance on single energies

- Test models on the single energies dataset
- Longitudinal model performance bad for low energies
- Currently: Improve model with hyperparameter tuning



Distribution at 3 GeV

- Asymmetric distributions of predicted energies
- Caused by asymmetric input

