Table 1: Training time (Time), number of model parameters (# params), additional parameters (#P adapt) to adapt the model to **all environments**.

Model	Time	#P	#P adapt
CoDa	10h	58K	234K
GEPS	9h	58K	11K
LEADS	1d 19h	58K	350K
CAVIA	4d 19h	58K	64

(a): Burgers

Time	#P	#P adapt
5h	76K	304K
4h	76K	14K
14h	76K	305K
1d 15h	76K	64

(b): Gray-Scott

Figure 1: Comparison of ERM baselines and GEPS methods, for varying nb. of environments (left Fig.) and of samples (right Fig.)

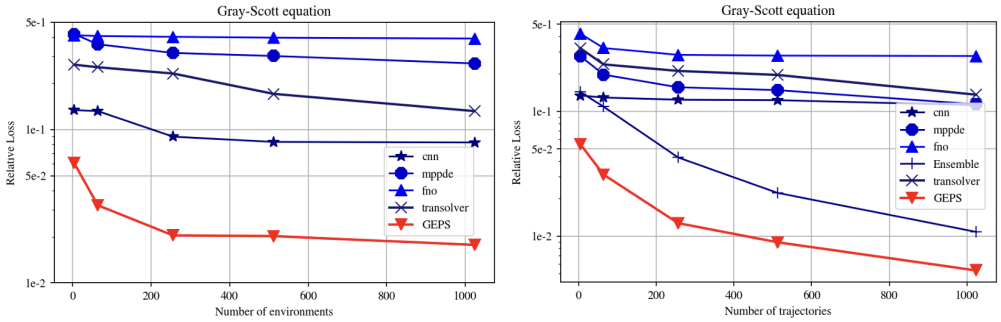

Table 2: Relative loss results on 4 environments with 16 samples per environment using an input window of observed states with increasing sizes (indicated in the "history" column).

(a): Gray-Scott Dataset

History	T-solver	FNO	CNN	GEPS
2	2.08e-1	2.21e-1	9.70e-2	4.10e-2
3	1.82e-1	1.86e-1	7.12e-2	4.02e-2
5	9.88e-2	1.76e-1	5.96e-2	**3.04e-2**
10	9.57e-2	1.75e-1	6.54e-2	3.82e-2

(b): Burgers Dataset

History	T-solver	FNO	CNN	GEPS
2	2.06e-1	6.48e-1	1.92e-1	1.82e-2
3	1.95e-1	4.28e-1	1.84e-1	1.25e-2
5	1.12e-1	3.07e-1	1.62e-1	8.61e-3
10	5.64e-2	6.13e-2	3.16e-2	**6.14e-3**

Table 3: **In-domain results, in range time horizon**. Metric is relative L2.

Type ↓	Dataset →	*Pendulum*	*Gray-Scott*	*Burgers*	*Kolmo*
Multi-task	LEADS	2.08e-1 ± 1.01e-2	3.11e-2 ± 2.48e-3	6.31e-3 ± 5.23e-4	5.61e-1 ± 3.71e-2
Meta-Learning	CAVIA	5.68e-1 ± 9.73e-2	1.63e-1 ± 3.82e-2	1.55e-2 ± 1.06e-3	6.19e-1 ± 2.02e-2
	FOCA	4.10e-1 ± 4.31e-2	1.71e-1 ± 5.10e-2	9.22e-2 ± 8.21e-2	6.30e-1 ± 2.02e-2
	CoDA-l1	2.17e-1 ± 1.08e-2	3.19e-2 ± 7.07e-4	4.98e-3 ± 1.98e-4	4.02e-1 ± 5.75e-2
	GEPS	**2.08e-1 ± 1.00e-3**	**2.22e-2 ± 1.77e-3**	**2.59e-3 ± 2.12e-5**	**2.94e-1 ± 3.60e-3**
Hybrid	APHYNITY	6.72e-1 ± 9.68e-2	**1.4e-3 ± 3.82e-4**	3.19e-2 ± 8.48e-4	NaN
	Phys-Adaptor	6.44e-1 ± 1.10e-2	1.55e-2 ± 1.41e-3	1.51e-2 ± 1.02e-3	NaN
	GEPS-Phy	**8.04e-2 ± 8.06e-3**	6.73e-3 ± 4.88e-4	5.43e-3 ± 3.53e-4	**2.78e-1 ± 3.53e-3**

Table 4: **Out-domain results, in range time horizon**. Metric is relative L2.

Type ↓	Dataset →	*Pendulum*	*Gray-Scott*	*Burgers*	*Kolmo*
Multi-task	LEADS	5.11e-1 ± 3.47e-2	3.81e-2 ± 7.68e-3	6.41e-2 ± 2.65e-3	9.18e-1 ± 1.35e-2
Meta-Learning	CAVIA	9.18e-1 ± 1.58e-1	2.31e-1 ± 6.86e-2	2.25e-1 ± 7.94e-3	8.48e-1 ± 1.65e-2
	FOCA	9.14e-1 ± 9.7e-2	1.45e-1 ± 3.34e-2	1.57e-1 ± 2.36e-2	9.18e-1 ± 1.40e-2
	CoDA-l1	6.62e-1 ± 3.17e-2	2.89e-2 ± 4.03e-3	7.45e-2 ± 6.15e-3	6.34e-1 ± 1.11e-1
	GEPS	**5.08e-1 ± 3.90e-2**	**1.86e-2 ± 2.11e-3**	**5.29e-2 ± 5.87e-3**	**5.1e-1 ± 1.12e-2**
Hybrid	APHYNITY	6.90e-1 ± 3.54e-3	**2.04e-3 ± 9.90e-4**	3.07e-1 ± 1.41e-3	NaN
	Phys-Adaptor	5.84e-1 ± 1.85e-2	1.82e-2 ± 6.42e-2	8.99e-2 ± 8.65e-3	NaN
	GEPS-Phy	**4.60e-1 ± 3.64e-2**	8.34e-3 ± 5.21e-4	6.81e-2 ± 3.75e-3	**4.47e-1 ± 1.72e-2**