

## Appendix

Best configurations:

Task	Dataset	Model	Hyperparameters				
			$\gamma_l$	$\gamma_e$	$\gamma_c$	$\alpha$	L1/L2
Triple Classification	YAGO39K	EIKE-PRE-EYE	1.0	0.4	0.3	1.0	L2
		EIKE -UNP-EYE	1.0	0.4	0.1	0.1	L1
		EIKE -PRE-MAT	1.0	1.0	0.4	0.5	L1
		EIKE -UNP-MAT	1.0	1.0	0.3	0.1	L1
	M-YAGO39K	EIKE -PRE-EYE	1.0	0.4	0.3	1.0	L2
		EIKE -UNP-EYE	1.0	0.4	0.1	0.1	L1
		EIKE -PRE-MAT	1.0	1.0	0.4	0.5	L1
		EIKE -UNP-MAT	1.0	1.0	0.3	0.1	L1
	DB99K242	EIKE -PRE-EYE	1.0	0.1	0.1	1.0	L1
		EIKE -UNP-EYE	1.0	0.4	0.1	0.1	L1
		EIKE -PRE-MAT	1.0	0.4	0.1	1.0	L1
		EIKE -UNP-MAT	1.0	0.4	0.1	0.1	L1
Link Prediction	YAGO39K	EIKE -PRE-EYE	1.0	0.1	0.1	0.1	L1
		EIKE -UNP-EYE	1.0	0.4	0.3	2.0	L1
		EIKE -PRE-MAT	1.0	0.1	0.1	2.0	L1
		EIKE -UNP-MAT	1.0	0.3	0.1	0.5	L1
	DB99K242	EIKE -PRE-EYE	1.0	1.0	0.4	1.0	L1
		EIKE -UNP-EYE	1.0	1.0	0.1	1.0	L1
		EIKE -PRE-MAT	1.0	0.4	0.1	1.0	L1
		EIKE -UNP-MAT	1.0	1.0	0.3	0.5	L1