1 Iris Dataset

(The results of *Setosa* VS *Versicolor* and *Setosa* VS *Virginica* are omitted because all algorithms are error-free in those situations.)

Total Number of Errors and Estimated P_{error}: *Versicolor* VS *Virginica*

	KL-1		KL-2		SKL		H		LDA	
	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}
dim=1	7/100	0.14	2/100	0.04	4/100	0.08	3/100	0.06	3/100	0.06
dim=2	3/100	0.06	3/100	0.06	3/100	0.06	3/100	0.06	-	-
dim=3	3/100	0.06	3/100	0.06	3/100	0.06	3/100	0.06	-	-

Total Number of Errors and Estimated P_{error}: Multi-SLDA VS LDA

	SKL-3 (Multi-SLDA)		LDA	
	total err.	*est.* P_{err}	total err.	*est.* P_{err}
dim=1	4/150	0.08	3/150	0.06
dim=2	3/150	0.06	3/150	0.06
dim=3	3/150	0.06	-	-

2 Banknote Authentication Dataset

Total Number of Errors and Estimated P_{error}

	KL-1		KL-2		SKL		H		LDA	
	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}
dim=1	54/1372	0.076	20/1372	0.026	20/1372	0.026	24/1372	0.032	32/1372	0.042
dim=2	23/1372	0.030	20/1372	0.026	23/1372	0.030	23/1372	0.030	-	-
dim=3	23/1372	0.030	23/1372	0.030	23/1372	0.030	23/1372	0.030	-	-

3 Climate Model Simulation Crashes Authentication Dataset

Total Number of Errors and Estimated P_{error}

	KL-1		KL-2		SKL		H		LDA	
	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}
dim=1	84/540	0.209	66/540	0.173	81/540	0.203	67/540	0.175	19/540	0.393
dim=2	61/540	0.163	60/540	0.141	56/540	0.153	52/540	0.125	-	-
dim=3	59/540	0.159	48/540	0.117	38/540	0.097	49/540	0.119	-	-

4 Seeds Dataset

(The results of Class 2 VS Class 3 are omitted because all algorithms are error-free in that situation.)

Total Number of Errors and Estimated P_{error}: Class 1 VS Class 2

	KL-1		KL-2		SKL		H		LDA	
	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}
dim=1	8/140	0.114	6/140	0.086	6/140	0.086	1/140	0.014	8/140	0.114

	KL-1		KL-2		SKL		H		LDA	
dim=2	6/140	0.086	6/140	0.086	6/140	0.086	1/140	0.014	-	-
dim=3	3/140	0.043	4/140	0.057	4/140	0.057	2/140	0.029	-	-

Total Number of Errors and Estimated P_{error}: Class 1 VS Class 3

	KL-1		KL-2		SKL		H		LDA	
	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}
dim=1	9/140	0.129	11/140	0.157	11/140	0.157	4/140	0.057	10/140	0.143
dim=2	10/140	0.143	4/140	0.057	10/140	0.143	4/140	0.057	-	-
dim=3	4/140	0.057	5/140	0.071	5/140	0.071	4/140	0.057	-	-

Total Number of Errors and Estimated P_{error}: Multi-SLDA VS LDA

	SKL-3 (Multi-SLDA)		LDA	
	total err.	*est.* P_{err}	total err.	*est.* P_{err}
dim=1	27/210	0.386	13/210	0.186
dim=2	27/210	0.386	13/210	0.186
dim=3	10/210	0.143	-	-

5 MAGIC Gamma Telescope Dataset

Total Number of Errors and Estimated P_{error}

	KL-1		KL-2		SKL		H		LDA	
	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}
dim=1	4848/ 19020	0.690	4839/ 19020	0.689	4847/ 19020	0.690	4840/ 19020	0.689	4126/ 19020	0.537
dim=2	4376/ 19020	0.613	4217/ 19020	0.591	4359/ 19020	0.611	4244/ 19020	0.595	-	-
dim=3	4502/ 19020	0.631	3834/ 19020	0.511	4484/ 19020	0.629	3765/ 19020	0.502	-	-

6 HTRU2 Dataset

Total Number of Errors and Estimated P_{error}

	KL-1		KL-2		SKL		H		LDA	
	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}
dim=1	559/ 17898	0.214	1279/ 17898	0.167	559/ 17898	0.214	581/ 17898	0.120	453/ 17898	0.237
dim=2	515/ 17898	0.151	1270/ 17898	0.156	498/ 17898	0.149	824/ 17898	0.126	-	-
dim=3	524/ 17898	0.145	661/ 17898	0.171	536/ 17898	0.143	544/ 17898	0.143	-	-

7 Abalone Dataset

Total Number of Errors and Estimated P_{error}: Male VS Female

	KL-1		KL-2		SKL		H		LDA	
	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}	total err.	*est.* P_{err}

	total err.	est. P_{err}	total err.	est. P_{err}	total err.	est. P_{err}	total err.	est. P_{err}	total err.	est. P_{err}
dim=1	1393/2835	0.935	1388/2835	0.932	1388/2835	0.932	1391/2835	0.934	1240/2835	0.904
dim=2	1288/2835	0.954	1289/2835	0.954	1289/2835	0.954	1289/2835	0.954	-	-
dim=3	1247/2835	0.919	1284/2835	0.944	1245/2835	0.917	1244/2835	0.916	-	-

Total Number of Errors and Estimated P_{error}: Male VS Infant

	KL-1		KL-2		SKL		H		LDA	
	total err.	est. P_{err}	total err.	est. P_{err}	total err.	est. P_{err}	total err.	est. P_{err}	total err.	est. P_{err}
dim=1	757/2870	0.545	730/2870	0.487	726/2870	0.485	676/2870	0.457	625/2870	0.433
dim=2	663/2870	0.448	704/2870	0.472	707/2870	0.474	651/2870	0.439	-	-
dim=3	670/2870	0.454	696/2870	0.469	671/2870	0.454	665/2870	0.451	-	-

Total Number of Errors and Estimated P_{error}: Female VS Infant

	KL-1		KL-2		SKL		H		LDA	
	total err.	est. P_{err}	total err.	est. P_{err}	total err.	est. P_{err}	total err.	est. P_{err}	total err.	est. P_{err}
dim=1	699/2649	0.523	562/2649	0.428	552/2649	0.420	505/2649	0.384	503/2649	0.381
dim=2	512/2649	0.388	585/2649	0.445	525/2649	0.398	499/2649	0.378	-	-
dim=3	528/2649	0.401	528/2649	0.401	527/2649	0.400	531/2649	0.403	-	-

Total Number of Errors and Estimated P_{error}: Multi-SLDA VS LDA

	SKL-3 (Multi-SLDA)		LDA	
	total err.	est. P_{err}	total err.	est. P_{err}
dim=1	2062/4177	1.414	1903/4177	1.370
dim=2	2035/4177	1.440	1903/4177	1.370
dim=3	2036/4177	1.398	-	-