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## **Computation time**

Total	1.2310140609741211min.

# **Experimental condition**

Type of tomography	StandardQpt
Nrep	100
N	[100, 1000]
RNG seed	777

### True object

Туре	Gate
Dim	2
HS	[[1. 0. 0. 0. ]

### **Tester objects**

1

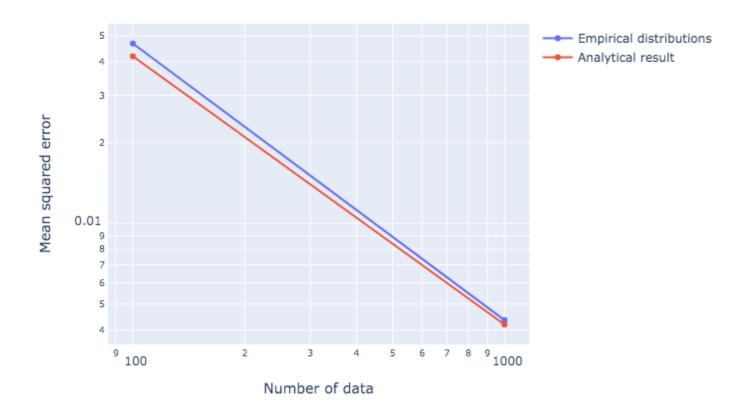
0	Туре	State
	Dim	2
	Vec	[0.70710678 0.70710678 0. 0. ]
1	Туре	State
	Dim	2
	Vec	[0.70710678 0. 0.70710678 0. ]
2	Туре	State
	Dim	2
	Vec	[0.70710678 0. 0. 0.70710678]
3	Туре	State
	Dim	2
	Vec	[ 0.70710678 0. 00.70710678]
4	Туре	Povm
	Dim	2
	Number of	2
	outcomes	_
	Vecs	[0.70710678 0.70710678 0. 0. ]
		[ 0.70710678 -0.70710678 0. 0. ]
5	Туре	Povm
	Dim	2
	Number of	2
	outcomes	
	Vecs	[0.70710678 0. 0.70710678 0. ]
	_	[ 0.70710678 00.70710678 0. ]
6	Туре	Povm
	Dim	2
	Number of	2
	outcomes	
	Vecs	[0.70710678 0. 0. 0.70710678]
		[ 0.70710678 0. 00.70710678]

### Cases

	Name	Parameterization	Tomography	Estimator
0	LinearEstimator(True)	True	StandardQpt	LinearEstimator
1	LinearEstimator(False)	False	StandardQpt	LinearEstimator
2	ProjectedLinearEstimator(True)	True	StandardQpt	ProjectedLinearEstimator
3	ProjectedLinearEstimator(False)	False	StandardQpt	ProjectedLinearEstimator

# **MSE** of empirical distributions

### Mean squared error

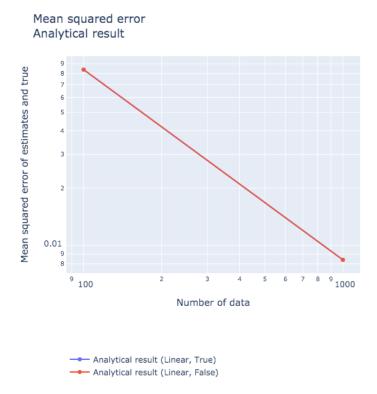


## **Consistency test**

	Type of tomography	Parametorization	Estimator	Result
0	StandardQpt	True	LinearEstimator	7.786920e-32
1	StandardQpt	False	LinearEstimator	2.525367e-30
2	StandardQpt	True	ProjectedLinearEstimator	6.339721e-15
3	StandardQpt	False	ProjectedLinearEstimator	8.857600e-16

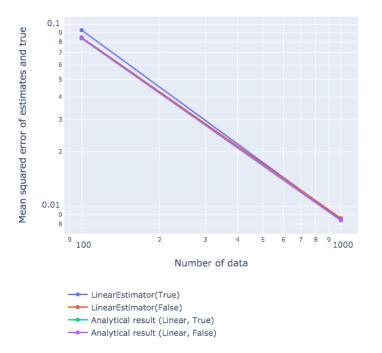
## **MSE** of estimators

### **Comparison of analytical results**

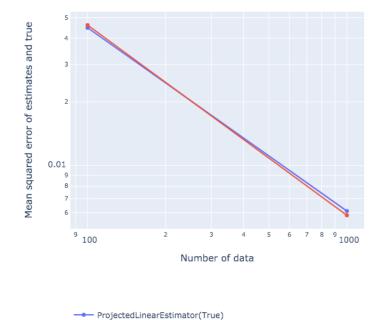


### **Comparison of parametrization**

## Mean squared error estimator=LinearEstimator



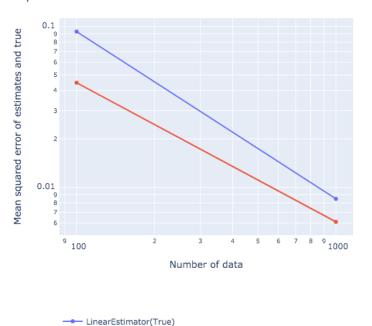
## Mean squared error estimator=ProjectedLinearEstimator



ProjectedLinearEstimator(False)

#### **Comparison of estimators**

Mean squared error parametrization=True



ProjectedLinearEstimator(True)

Mean squared error parametrization=False

