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## **Computation time**

Total	1.9197394847869873min.
_	

# **Experimental condition**

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

#### True object

Туре	Gate
Dim	2
нѕ	[[1. 0. 0. 0.]

#### **Tester objects**

1

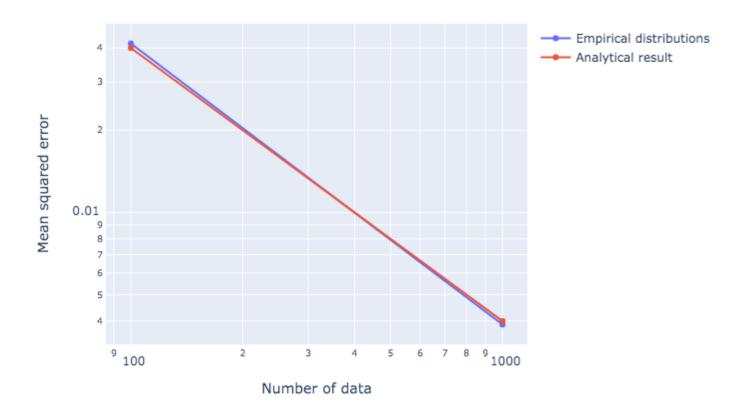
0	Туре	State
	Dim	2
	Vec	[0.70710678 0.70710678 0. 0. ]
1	Туре	State
	Dim	2
	Vec	[0.70710678 0. 0.70710678 0. ]
2	Туре	State
	Dim	2
	Vec	[0.70710678 0. 0. 0.70710678]
3	Туре	State
	Dim	2
	Vec	[ 0.70710678 0. 00.70710678]
4	Туре	Povm
	Dim	2
	Number of	2
	outcomes	_
	Vecs	[0.70710678 0.70710678 0. 0. ]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

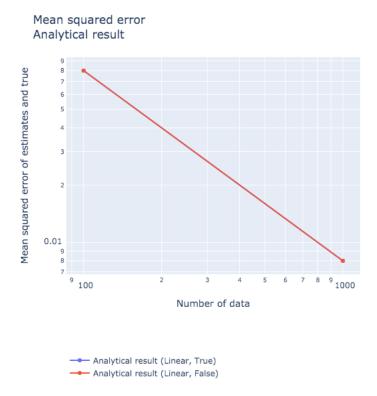


## **Consistency test**

	Type of tomography	Parametorization	Estimator	Result
0	StandardQpt	True	LinearEstimator	8.628166e-32
1	StandardQpt	False	LinearEstimator	2.718643e-30
2	StandardQpt	True	ProjectedLinearEstimator	5.782767e-30
3	StandardQpt	False	ProjectedLinearEstimator	4.604574e-30

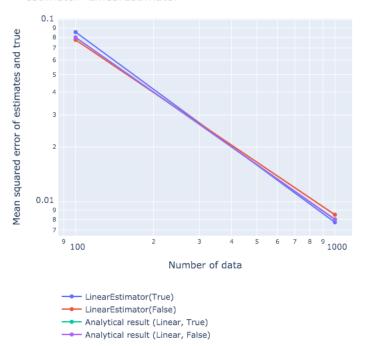
### **MSE** of estimators

#### **Comparison of analytical results**

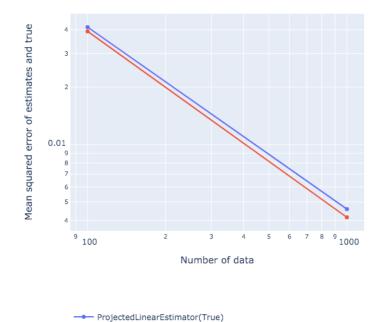


#### **Comparison of parametrization**

### Mean squared error estimator=LinearEstimator



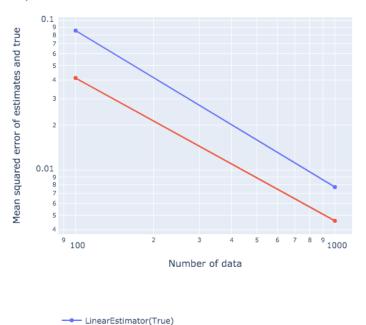
### Mean squared error estimator=ProjectedLinearEstimator



ProjectedLinearEstimator(False)

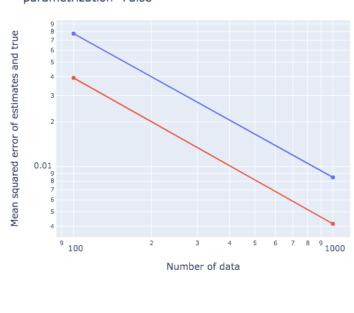
#### **Comparison of estimators**

### Mean squared error parametrization=True



ProjectedLinearEstimator(True)

### Mean squared error parametrization=False



LinearEstimator(False)ProjectedLinearEstimator(False)