UM-SJTU Joint Institute
Physics Laboratory
Data Sheet (Exercise 1)

Name: _____ Student ID: _____

Group: _____ Date: _____

NOTICE. Please remember to show the data sheet to your instructor before leaving the laboratory. The data sheet will not be accepted if the data are recorded with pencil or modified by correction fluid/tape. If a mistake is made in recording a datum item, cancel the wrong value by drawing a fine line through it, record the correct value legibly, and ask your instructor to confirm the correction. Please remember to take a record of the precision of the instruments used.

You are required to hand in the original data with your lab report, so please keep the data sheet properly.

	Calliper	Electronic balance	Timer
Resolution			
Relative uncertainty	⁄		

Table 1. Precision of the measurement instruments.

	1	2	3	4
Disk Ø [__] ± ____[__]				
Hoop $Ø_1$ [__] ± ____[__]				
Hoop $Ø_2$ [__] ± ____[__]				
Cylinder A Ø [__] ± ____[__]				
Cylinder B Ø [__] ± ____[__]				
Cone pulley Ø [__] ± ____[__]				
Hole ① d [__] ± ____[__]			⁄	
Hole ② d [__] ± ____[__]			⁄	
Hole ③ d [__] ± ____[__]			⁄	
Hole ④ d [__] ± ____[__]			⁄	

Table 2. Calliper measurements. The hole numbers should be consistent with your choice in table 4. The distance of the hole to the rotation center should be measured as: the inner distance and the outer distance. Other parameters are measured 4 times.

Disk [__] ± ____ [__]		Hoop [__] ± [__]	
Cylinder A [__] ± ____ [__]		Cylinder B [__] ± [__]	
Weight [__] ± ____ [__]			

Table 3. Mass measurements.

Seat number: _____ Instructor's signature: _____

	Deceleration					Acceleration				
Empty turntable	k	1	2	3	4	k	1	2	3	4
	t [___]					t [___]				
	k	5	6	7	8	k	5	6	7	8
	t [___]					t [___]				
With disk	Deceleration					Acceleration				
	k	1	2	3	4	k	1	2	3	4
	t [___]					t [___]				
	k	5	6	7	8	k	5	6	7	8
	t [___]					t [___]				
With hoop	Deceleration					Acceleration				
	k	1	2	3	4	k	1	2	3	4
	t [___]					t [___]				
	k	5	6	7	8	k	5	6	7	8
	t [___]					t [___]				
Cylinder A in hole ①, B in ②	Deceleration					Acceleration				
	k	1	2	3	4	k	1	2	3	4
	t [___]					t [___]				
	k	5	6	7	8	k	5	6	7	8
	t [___]					t [___]				
Cylinder A in hole ③, B in ④	Deceleration					Acceleration				
	k	1	2	3	4	k	1	2	3	4
	t [___]					t [___]				
	k	5	6	7	8	k	5	6	7	8
	t [___]					t [___]				

Table 4. Time measurements. The chosen hole ① and hole ② should be a symmetric pair, and hole ③ and hole ④ should be another symmetric pair.

Instructor's signature: _____