

Quick Reference

	9/22 Sun.	9/23 Mon.	9/24 Tue.	9/25 Wed.	9/26 Thu.
08:00		Opening (08:50)		Field Trips	
09:00		Taiwan's role in rotation seismology	Structure		Array
10:40					Final Discussion
11:00		Break			Check out & Lunch box & Farewell
12:00		ROMY progress	Theory		
13:30		Lunch			
15:00		Data analysis	Instrument I		
15:30		Break			
16:00		Planetary, volcano	Instrument II		
16:45	Registration & Ice breaker	Poster	Poster		
17:00					
17:30					
19:00		Shuttle bus at Lobby			
19:30		Banquet			

Conference Program

9/23 Monday

Time	Title	Speaker
08:50-09:00	Opening	Heiner Igel
TOPIC 1 : Taiwan's role in rotation seismology		
Convener : Wen-Tzong Liang		
09:00-09:30	Review of Rotation Seismology Research in Taiwan	Bor-Shouh Huang
09:30-10:00	Source Parameters of 2018 Mw6.4 Hualien, Taiwan, Earthquake Derived from Nanao Array: A Field Test of a 6 DOF Observation Facility	Wu-Cheng Chi
10:00-10:30	What do we learn from near field 6C recording of 2018 Mw6.4 Hualien Earthquake	Kuo-Fong Ma
10:30-10:40	Discussion	
10:40-11:00	Coffee Break	
TOPIC 2 : ROMY progress		
Convener : Heiner Igel		
11:00-11:30	The ROMY project: A 4-component ring laser for geophysics and geodesy	Heiner Igel (Invited Speaker)
11:30-11:45	Sensor orientation and perimeter stabilisation of the ROMY installation	André Gebauer
11:45-12:00	Discussion	
12:00-13:30	Lunch	
TOPIC 3 : Data analysis		
Convener : Vladimir Graizer		
13:30-14:00	Land-atmosphere interactions in the low-frequency seismic band and inversion for shallow elasticity structure	Toshiro Tanimoto (Invited Speaker)
14:00-14:15	Determine phase velocity and wave field azimuth of surface wave from joint analysis of seismograph and ground rotation	Chin-Jen Lin
14:15-14:30	DEFORMATIONS AND ROTATIONAL MOTIONS EXTRACTED FROM DOWNHOLE ARRAY RECORDINGS	Vladimir Graizer
14:30-15:00	Six-degree-of-freedom seismogeodesy by combining high-rate GNSS, accelerometers and gyroscopes	Jianghui Geng (Invited Speaker)
15:00-15:15	Discussion	
15:15-15:45	Coffee Break	
TOPIC 4 : Planetary, volcano		
Convener : Felix Bernauer		
15:45-16:00	PIONEERS H2020-SPACE European project: 6DoF ground motion sensors for planets and asteroids	Felix Bernauer
16:00-16:15	Volcanic eruption and ground rotational motion	Minoru Takeo
16:15-16:30	6C Recordings at Active Volcanoes	Joachim Wassermann
16:30-16:45	Discussion	
16:45-19:00	Poster (posters stay until end of workshop)	
19:00	Shuttle bus at Lobby (Yin-Bin building)	
19:30	Banquet	

9/24 Tuesday

Time	Title	Speaker
TOPIC 5 : Structure		
Convener : Zbigniew Zembaty		
09:00-09:30	Rotation in buildings during earthquake loading: comparison of rotation and structural drift	Philippe Guéguen (Invited Speaker)
09:30-09:45	Testing accelerometer, GNSS and rotation sensors for strong ground motions on an industrial robot arm	Yara Rossi
09:45-10:00	Testing rotation rate sensors in structural health monitoring	Zbigniew Zembaty
10:00-10:15	6-dof strong surface seismic record of MM intensity VII and its effect on a slender tower and tall buildings	Piotr Bońkowski
10:15-10:30	Application of dynamic tilt correction with direct measurements of rotation	Felix Bernauer
10:30-10:40	Discussion	
10:40-11:00	Coffee Break	
TOPIC 6 : Theory		
Convener : Krzysztof Teisseyre		
11:00-11:15	The phase fields concept – qualitative discussion	Krzysztof Teisseyre
11:15-11:30	Seismic Response of reduced micropolar elastic half-space	Mohammad Atif
11:30-11:45	Seismic wave propagation in Layered Reduced Micropolar Half-space	Raghukanth Stg
11:45-12:00	Discussion	
12:00-13:30	Lunch	
TOPIC 7 : Instrument I		
convener : Johana Brokesova		
13:30-14:00	Progress in high resolution Sagnac Interferometry	Ulrich Schreiber (Invited Speaker)
14:00-14:15	Rotational ground motion instrumentation: blueSeis continues its quest for innovation	Frédéric Guattari
14:15-14:30	Improving of signal-to-noise ratio by nonlinear stacking of six-component seismograms	Johana Brokesova
14:30-14:45	A high sensitivity giant dual-polarization fiber optic gyroscope for rotational seismology	Yuwen Cao
14:45-15:00	Discussion	
15:00-15:30	Coffee Break	
TOPIC 8 : Instrument II		
convener : Jianghai Geng		
15:30-15:45	Experimental perspectives for rotational seismology – construction of optical fiber sensors set	Anna Kurzych
15:45-16:00	Principles of a single inertial mass 6-DOF accelerometer	Nick Bernitsas
16:00-16:15	Detection of rotation and strain with no common time-moments	Krzysztof Teisseyre
16:15-16:30	Discussion	
16:30-17:30	Poster (posters stay until end of workshop)	
17:30	Dinner	

9/26 Thursday

Time	Title	Speaker
TOPIC 9 : Array		
Convener : Nori Nakata		
09:00-09:30	Characterization of earthquake ground motion and ambient-noise correlation using a rotational seismometer and an array-based rotational motion	Nori Nakata (Invited Speaker)
09:30-10:00	Rotational motion and spatial wavefield gradient data in seismic exploration – a review	Cedric Schmelzbach (Invited Speaker)
10:00-10:15	Uncertainty quantification in rotational seismology	Roxanne Rusch
10:15-11:00	Final Discussion	
11:00	Check out & Lunch box & Farewell	

Poster

NO.	Name	Affiliation	Title
R01	Chu-Fang Yang	Taiwan International Graduate Program, Academia Sinica and National Central University	Seismically detected ground tilts induced by precipitation and fluvial processes: Examples from Taiwan
R02	Celine Hadziioannou	University of Hamburg	Investigating seismic background noise with six degrees of freedom ground motion measurements
R03	Chang Chen	China University of Geosciences, Beijing	Comparisons of Travelling-Wave Method and Difference Method for Calculating Rotational Components
R04	Dong-qing Li	China University of Geosciences(Beijing)	Calculating Rotational Ground Motions by Finite Difference Method
R05	Lixia Sun	China University of Geosciences, Beijing	3D 6C elastic wave simulation
R06	Shihao Yuan	Ludwig Maximilian University of Munich	Six degrees of freedom analysis of point ground motions: application to G-ring and ROMY data
R07	Shihao Yuan	Ludwig Maximilian University of Munich	Fracture characterization from walkaround VSP in the presence of 6C sensors
R08	Shihao Yuan	Ludwig Maximilian University of Munich	Six degree-of-freedom broadband ground motion observations with portable sensors: validation, local earthquakes, signal processing
R09	Shihao Yuan	Ludwig Maximilian University of Munich	Rupture Tracking with 6 DoF Ground Motion Observations: A Synthetic Study

NO.	Name	Affiliation	Title
R10	Roxanne Rusch	CEA, DAM, DIF, F-91297 Arpajon, France	Exploration of the relations between seismic source moment tensor and seismic rotations.
R11	Michal Dudek	Military University of Technology	Near-field rotations excited by the microblast-method excavations
R12	Xinming Qiu	China University of Geosciences, Beijing	Numerical characteristics of surface waves on 3D6C records
R13	Stefanie Donner	BGR Hannover	Seismic point and kinematic source solutions from rotational ground motion
R14	Jiri Malek	IRSM CAS	New prototype of 6-component seismograph Rotaphone CY: laboratory testing and pilot measurements

Poster Display

