

# 14<sup>th</sup> Joint Meeting of UJNR Panel on Earthquake Research

25<sup>th</sup>-27<sup>th</sup> September 2024,

Hotoku Kaikan, Kanagawa Prefecture, Japan

## PROGRAMME

### Wednesday, September 25<sup>th</sup>

08:10-		Registration	
08:45		<b>Opening:</b> Welcome address by Panel Co-Chairs <b>Satoshi Yamamoto and Gavin Hayes</b>	
		Announcement of general information	
<b>Session 1: National Policies, Strategies Programs, Networks, and ongoing/upcoming Projects</b> <b>Chairs: Yehuda Ben-Zion and Aitaro Kato</b> (15 minutes for Oral presentations include 3 minutes to discuss and switch presenters.)			
09:00	O-01	Aitaro Kato	Recent activities of the Earthquake Research Committee, the Headquarters for Earthquake Research Promotion, Japan (HERP)
09:15	O-02	Yehuda Ben-Zion	The Statewide California Earthquake Center (SCEC)
09:30	O-03	Andrea Donnellan	NASA's NISAR Mission and Surface Topography and Vegetation (STV) Observable
09:45	O-04	Shin Aoi	Development and Construction of Nankai Trough Seafloor Observation Network for Earthquakes and Tsunamis: N-net
10:00	O-05	Marcos Alvarez	The Southern California Seismic Network (SCSN), Modernization for Earthquake Early Warning
10:15 -10:35		Break	
10:35	O-06	Naoshi Hirata	Nankai Trough Earthquake Extra Information (Megathrust Earthquake Attention) issued following the 2024 Hyuga-nada Earthquake (Mw7.0)
10:50	O-07	Takuya Nishimura	Long-term forecast model for crustal earthquakes using geodetic data in Japan
<b>Session 2: The 2024 Noto Earthquake Sequence, and other Recent Earthquakes</b> <b>Chairs: Dara Goldberg and Akemi Noda</b>			
11:05	O-08	Akemi Noda	Overview of the 2024 Noto Peninsula Earthquake
11:20	O-09	Dara Goldberg	Recent updates to rapid kinematic source characterization at the USGS
11:35	O-10	Aitaro Kato	The long-lasting earthquake swarm leading up to the 2024 M7.6 Noto earthquake, Japan
11:50	O-11	Masanobu Shishikura	Relationship between the coseismic uplift during the 2024 Noto Peninsula earthquake and Holocene marine terraces
12:05 -13:40		Lunch Break	
<b>Session 2 (cont'd) :</b> <b>Chairs: Dara Goldberg and Akemi Noda</b>			
13:40	O-12	Takahiko Inoue	Distribution and activities of submarine active faults along the northern coast of Noto Peninsula

13:55	O-13	Nadine Reitman	Fault surface rupture in the 2023 Türkiye earthquakes from satellite and field data
14:10	O-14	Hisao Kondo	Paleoseismological researches before and after the 2023 destructive earthquakes on the East Anatolian fault system
<b>Session 3: Emerging new technologies</b>			
<b>Chairs: Tim Clements and Koji Tamaribuchi</b>			
14:25	O-15	Koji Tamaribuchi	Development of automatic hypocenter determination method combined with machine learning in JMA
14:40	O-16	Kengo Shimojo	Detection of dynamically-triggered earthquakes using CNN for seismic phase discrimination
14:55	O-17	Hiroyuki Matsumoto	Hydroacoustic and tsunami waves originating from a series of submarine earthquakes near Torishima Island detected by a seafloor fiber optic strainmeter
15:10 -15:30		Break	
15:30	O-18	Takahiko Uchide	Application of Advanced Information Sciences to Seismological Studies at Geological Survey of Japan, AIST
15:45	O-19	Tim Clements	Earthquake Early Warning with Graph Learning
<b>Session 4: Strong Ground Motion Studies</b>			
<b>Chairs: Tara Nye and Yadab Prasad Dhakal</b>			
16:00	O-20	Yadab Prasad Dhakal	Ground motion prediction equations for PGA and PGV at the S-net seafloor sites and their application to the KiK-net sites on northeast Japan
16:16	O-21	Eric M. Thompson	Recent ShakeMap Improvements to Further Support Post-Earthquake Damage Assessment
16:30	O-22	Alan Yong	Perspectives on the state of practice in site characterization for site response analyses
16:45	O-23	Takumi Hayashida	Site amplification characteristics of central Wajima, Ishikawa, inferred from aftershock recordings of the 2024 Noto Peninsula earthquake
17:00	O-24	Tara Nye	Estimates of $k_0$ in the San Francisco Bay Area: Complexities of isolating amplification and attenuation at non-rock sites
17:15-17:30		Announcement & Group Photo	
18:00-		Reception Banquet (2F: Room Kohaku)	

# Thursday, September 26<sup>th</sup>

08:10-09:00	Registration		
	Announcement of general information		
<b>Session 5: Subduction Zone Science</b>			
<b>Chairs: David Shelly and Makoto Matsubara</b>			
09:00	O-25	Yutaka Hayashi	Modification of the Precomputed Tsunami Database for JMA's Real-time Tsunami Forecast in Response to the 2016 off Fukushima Earthquake
09:15	O-26	Kazutoshi Imanishi	Detection of annual-scale variations in interplate coupling by combining intraplate earthquakes and geodetic data: Application to the Tohoku-oki and Nankai
09:30	O-27	Makoto Matsubara	Three-dimensional seismic velocity structure around the Tokyo Metropolitan area, focusing the subducting Philippine Sea plate
09:45	O-28	Jessica Murray	Incorporating real-time GNSS-based earthquake early warning in the ShakeAlert system
10:00	O-29	Takayuki Miyazaki	REGARD: Real-time Crustal Deformation Monitoring based on GNSS data in Japan and its Performance for 2024 Noto Earthquake
10:15-10:35	Break		
10:35	O-30	Kaoru Isami	Recent Technical Improvement of Earthquake Early Warning Operated by Japan Meteorological Agency and Utilization of Earthquake Early Warning Issued for the 2024 Noto Peninsula Earthquake
10:50	O-31	Yuki Kodera	P-wave-based earthquake early warning without P-wave detection: Investigation of a P-wave-based PLUM algorithm
11:05	O-32	David Shelly	Low frequency Earthquakes Illuminate the Southern Edge of Cascadia Subduction at the Mendocino Triple Junction
11:20	O-33	Nelson Pulido	Estimation of megathrust earthquake potential along the Peruvian subduction zone based on mechanical coupling model and the earthquake energy budget
<b>Poster Short Presentations : Chair Basara Miyahara</b>			
11:35	P-01	Basara Miyahara	Global Geodesy Supply Chain - underpinning infrastructure for earthquake science -
11:38	P-02	Jumpei Shimizu	Off the Coast of Hokkaido and Sanriku Subsequent Earthquake Advisory
11:41	P-03	Tomokazu Kobayashi	Nationwide crustal deformation monitoring by SAR satellite
11:44	P-04	Tomokazu Kobayashi	SAR-detected crustal deformation and topographic changes of the 2024 Noto Peninsula earthquake
11:47	P-05	Hisashi Suito	Postseismic deformation caused by the 2024 Noto Peninsula earthquake
11:50	P-06	Ryo Endo	Seismic Ground Disaster Assessment System (SGDAS) and its estimation results for the 2024 Noto Earthquake
11:53	P-07	Hisahiko Kubo	Forecasting ground-motion exceedance probability based on short-term earthquake occurrence probability information after a large earthquake
11:56	P-08	Shinzaburo Ozawa	Monitoring of interplate aseismic slip in southwest Japan by Network Inversion Filter.

11:59	P-09	Bunichiro Shibazaki	On dynamic rupture modeling of megathrust earthquakes based on estimated coupled regions in the Nankai trough
12:02	P-10	Hiroshi Munekane	Is the subsidence of Aso Caldera after the 2016 Kumamoto Earthquake of volcanic origin?
12:05 -13:30		Lunch Break	
13:30-14:40		<b>Poster Presentation</b>	
<b>Session 5 (Cont'd) :</b>			
<b>Chairs: David Shelly and Makoto Matsubara</b>			
14:40	O-34	Keisuke Ariyoshi	Real-time Monitoring of Strain Change around the Nankai Trough for Early Seafloor Crustal Deformation Detection
14:55	O-35	Koya Nagae	GNSS-Acoustic seafloor geodetic observation by Japan Coast Guard
<b>Session 6: Earthquake Hazard Studies, Recurrence</b>			
<b>Interaction between volcanos and earthquakes</b>			
<b>Chairs: Hiroshi Munekane and Joan Gomberg</b>			
15:10	O-36	Andrea Llenos	Developing Smoothed Seismicity Forecasts for U.S. National Seismic Hazard Models
15:25	O-37	Ken Hudson	Next Generation Liquefaction Database and Probabilistic Liquefaction Model Development
15:40-16:00		Break	
16:00	O-38	Alexandra Hatem	What is the budget of earthquake rates in the upper plate?
16:15	O-39	Joan Gomberg	Linking Aqueous Sedimentary Processes to Earthquake Recurrence Models
16:30	O-40	Nicholas van der Elst	ETAS-positive: extracting unbiased epidemic-type aftershock forecast models from incomplete earthquake catalogs
16:45	O-41	Akira Sasagawa	Trial of automatic change detection method using Haar Wavelet among two Sentinel-2 images for the 2024 Noto Peninsula earthquake
17:00 -17:30		Proposal of resolution by the drafting committee members Closing remarks by <b>Kazushige Kawase and Gavin Hayes</b>	
<b>Friday, 27th September 【Field Trip】</b>			
08:30		Meeting place: Odawara station (JR) west exit	
		Stop 1 : Old Sagami-River bridge piers (Ancient bridge piers appeared after the 1923 Great Kanto Earthquake)	
		Stop 2 : Enoshima (Trace of uplifting by the 1923 Great Kanto Earthquake)	
		Stop 3 : Kamakura (Walking along Wakamiya-oji (approach to Tsurugaoka Hachimangu Shrine), which was repeatedly washed away by tsunamis after candidate great Kanto earthquakes.)	
16:00		Ofuna station (JR) * Arrival at Ofuna station may be delayed due to traffic congestion.	