# **Program for Oral Session (April 21)**

| Time  | <u>Presentater</u> | <b>Organization</b>                   | Paper Topic  |  |  |
|---|--------------------|---------------------------------------|--|--|--|
| Current Progress of Earthquake Early Warning              |                    |                                       |  |  |  |
| 10:30 - 10:35   | 5 Opening Remark   |                                       |  |  |  |
| 10:35 - 11:05   | 5 Keiji Doi        | JMA                                   | Earthquake Early Warning in Japan - Provision to the General Public and its Results –                      |  |  |
| 11:05 - 11:35   | 5 Richard Allen    | UC Berkeley, US                       | ElarmS across California: Current realtime performance and future outlook                                  |  |  |
| Lunch Break   |                    |                                       |  |  |  |
| Earthquake Early Warning Algorithms 1                     |                    |                                       |  |  |  |
| 12:30 - 1:00  | Aldo Zollo         | Univ. of Naples<br>Federico II, Italy | The Earthquake Early Warning System in southern Italy: Technologies,<br>Methods and Performance Evaluation |  |  |
| 1:00 - 1:20   | Yih-Min Wu         | Taiwan Univ.,<br>Taiwan               | Tau_c and Pd methods in earthquake early warning and its development in Earthworm system                   |  |  |
| 1:20 - 1:40   | Masumi Yamada      | Kyoto Univ.                           | Developing a prototype system for earthquake early warning using tau_c method                              |  |  |
| 1:40 - 2:00   | Maren Boese        | Caltech, US                           | Updates on EEW Testing and Finite Fault Research at Caltech  |  |  |
| 2:00 - 2:20   | Friedemann Wenzel  | Karlsruhe Univ.,<br>Germany           | Efficiency of Earthquake Early Warning Systems   |  |  |
| 2:20 - 2:40   | Mustafa Erdik      | Bogazici Univ,<br>Turkey              | Earthquake Early Warning and Rapid Loss Information Generation in İ stanbul                                |  |  |
| Application of New Technology to Earthquake Early Warning |                    |                                       |  |  |  |
| 2:50 - 3:10   | Ken'ichi Takamatsu | Oki Electric                          | Application of the earthquake early warning system for the OKI semiconductor factory                       |  |  |
| 3:10 - 3:30   | Katsuhisa Kanda    | Kajima                                | Robust and reliable early warning system for engineering   |  |  |
| 3:30 - 3:50   | Tsutomu Sato       | SDR                                   | Realtime Information Systems for Tokyo Metro Company and Others  |  |  |

Real-Time Performance of the Virtual Seismologist Earthquake Early 3:50 - 4:10 Georgia Cua ETH, Switzerland Warning Algorithm in Southern California Univ. of Naples Uncertainty in early warning predictions of engineering ground motion 4:10 - 4:30 Iunio Iervolino

parameters: what really matters?

Federico II, Italy

#### Discussion

4:30 - 5:00 Discussion

# **Program for Oral Session (April 22)**

| <u>Time</u>                                 | <u>Presentater</u> | <b>Organization</b> | Paper Topic   |  |  |
|---|--------------------|---------------------|---|--|--|
| Use of Earthquake Early Warning Information |                    |                     |   |  |  |
| 9:00 - 9:20                                 | Yoshinori Maeda    | NTT Docomo          | Not only EEW, but also "Disaster and Evacuation Information" to Cellular Phone  |  |  |
| 9:20 - 9:40                                 | Masato Motosaka    | Tohoku Univ.        | Application of Earthgquake Early Warning System in Schools and Experience of the 2008 Iwate-Miyagi Nairiku Earthquake |  |  |
| 9:40 - 10:00                                | Shigeki Horiuchi   | NIED                | Home Seismometer for Earthquake Early Warning   |  |  |
| 10:00 - 10:20                               | Jim Goltz          | OES, US             | Earthquake Early Warning: Societal and Public Policy Issues   |  |  |
| Development of Early Warning Systems        |                    |                     |   |  |  |
| 10:30 - 10:50                               | Hanshu Peng        | CEA, China          | Prototype Earthquake Early Warning System in the Beijing Capital Region of China                                      |  |  |
| 10:50 - 11:10                               | Nai-Chi Hsiao      | CWB, Taiwan         | Development of earthquake early warning system in Taiwan  |  |  |
| 11:10 - 11:30                               | William Leith      | USGS, US            | Earthquake early warning in the context of the USGS Advanced National Seismic System                                  |  |  |

#### Lunch Break

# **Poster Session**

12:30 - 2:20 Poster Session

# Earthquake Early Warning Algorithms 2

| 2:30 - 2:50 Luis Rivera       | Strasbourg Univ.,<br>France                | Using W phase for regional tsunami warning and rapid earthquake hazard assessment   |
|-------------------------------|--|---|
| 2:50 - 3:10 Tom Heaton        | Caltech, US                                | Probabilistic Prediction of Rupture Length, Slip and Seismic Ground<br>Motions for au Ongoing Rupture   |
| 3:10 - 3:30 Shunroku Yamamo   | to Railway Technical<br>Research Institute | A robust method for imaging asperities of large earthquakes   |
| 3:30 - 3:50 Mitsuyuki Hoshiba | Meteorological<br>Research Institute       | Uncertainty of anticipation of seismic intensities -A study of fluctuation of anticipated seismic intensities by the method of current Earthquake Early Warning - |
| Earthquake Early Warning Algo | rithms 3                                   |   |
| 4:00 - 4:20 Kojiro Irikura    | AIT  | Basic study for developing the Earthquake Early Warning system for great earthquakes - case of ground motions in large crustal earthquakes-                       |
| 4:20 - 4:40 Yutaka Nakamura   | SDR  | Earthquake Early Warning and Realtime Earthquake Disaster Prevention  |

#### Univ. of Naples Federico II, Italy Consequence-Based Early warning systems

### Discussion

5:00 - 5:30 Discussion

4:40 - 5:00 Gaetano Manfredi

# **Program for Poster Session (April 22)**

| <u>No</u> | <b>Presentater</b>             | <b>Organization</b>                     | Paper Topic  |
|-----------|--------------------------------|---|--|
| 1         | Tomohiro Kubo                  | ABS consulting                          | Application of Earthquake Early Warning System to Estimation of<br>Long-period Ground Motion for High-Rise Building in Tokyo, Japan  |
| 2         | Kazuaki Masaki                 | AIT                                     | EEW distribution network dveloped by Disaster Prevention Resarch Center, AIT   |
| 3         | Susumu Kurahashi               | AIT                                     | Improvement of Earthquake Early Warning - Intensity Estimation from Initial Part of P-wave   |
| 4         | Yuichiro Nishimura             | AIT                                     | EEW for Tokai industrial region - application to the manufacturing industry and these effects  |
| 5         | Hiroshi Asahara                | Astom R&D                               | Development and Operation of Early Earthquake Warning System for Radio Broadcasting  |
| 6         | Kalpesh Solanki                | Caltech, US                             | EEW Implementaiton at Caltech  |
| 7         | Juan-Manuel<br>Aranda-Espinosa | CIRES A.C.,<br>Mexico                   | Mexican Sistema de Alerta Sismica evolution  |
| 8         | Satoshi Fujita                 | Denki Univ.                             | Intelligent seismic isolation system using EEW   |
| 9         | Philip Maechling               | Univ. of Southern<br>California, US     | Proposed Time Measurement Model for Earthquake Early Warning Systems   |
| 10        | Giovanni Iannaccone            | INGV, Itali                             | PRESTo: a new stand-alone software tool for earthquake early warning   |
| 11        | Takashi Akazawa                | GRI                                     | Real-Time Strong Motion Observation System aiming at the EEW<br>application by CEORKA (The Committee of Earthquake Observation<br>and Research in the Kansai Area)             |
| 12        | Keiji Doi                      | JMA                                     | The present status of Earthquake Early Warning in Japan  |
| 13        | Shinji Sato                    | Railway Technical<br>Research Institute | Practical use of Earthquake Early Warning(EEW) System for Shinkansen   |
| 14        | Shunta Noda                    | Railway Technical<br>Research Institute | Evaluation of the accuracy of back-azimuths estimated in real-time by<br>using single station record time by using single station record                                       |
| 15        | Kazuhiro Iwakiri               | Meteorological<br>Research Institute    | Study on attenuation relations focused on near source region -Evaluation of their applicability for earthquake early warning-  |
| 16        | Kazuo Ohtake                   | Meteorological<br>Research Institute    | Techniques of using data from OBS stations for EEW   |
| 17        | Shigeki Horiuchi               | NIED                                    | Automatic arrival time picking using many parameters for the onset discrimination  |
| 18        | Ken'ichi Takamatsu             | Oki Electric                            | Real-time seismic hazard mitigation system JBS-01  |
| 19        | Gaetano Festa                  | Univ. of Naples<br>Federico II, Italy   | Early radiation and final magnitude : insights from source kinematics  |
| 20        | Jun Saita                      | SDR                                     | New Field of Earthquake Early Warning and its Examples   |
| 21        | Masato Motosaka                | Tohoku Univ.                            | Development of Regional Earthquake Early Warning System with<br>Structural Health Monitoring Function and Real-Time Ground Motion<br>Prediction Using Front-Site Waveform Data |
| 22        | Takao Kagawa                   | Tottori Univ.                           | Designing of three stage seismic intensity meter<br>supported by earthquake early warning  |
| 23        | Holly Brown                    | UC Berkeley, US                         | Testing ElarmS with Japanese Earthquakes   |