Pisa, Italy - June 4-6, 2008
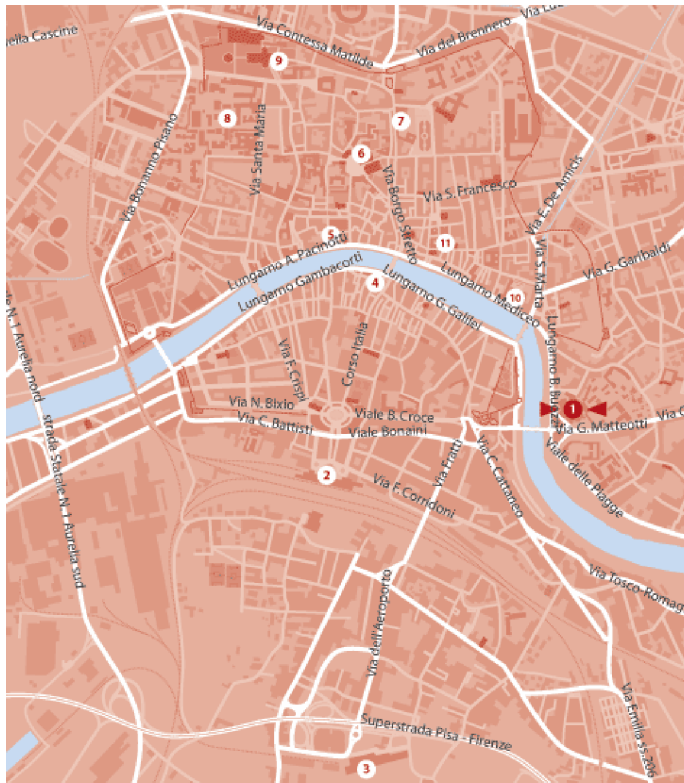
The 6th Int'l Conference of the
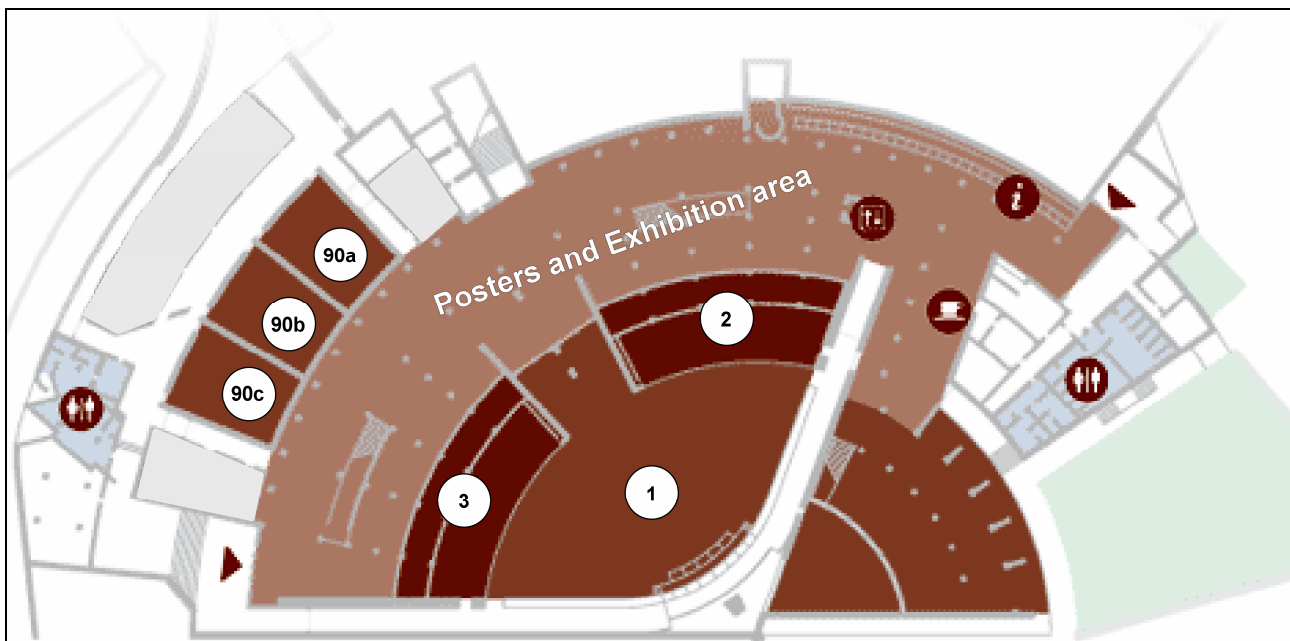International Society for Gerontechnology

Full Conference Programme
DRAFT

Keynote speakers

Prof. Alain Berthoz
Director, Laboratory of Physiology of Perception and Action, Collège de France, Paris, F

Dr. Etienne Burdet
Senior Lecturer, Imperial College London, UK

Prof. Maria Chiara Carrozza
Director, Scuola Superiore Sant'Anna, Pisa, I

Prof. Herman Bouma
President, International Society for Gerontechnology, Eindhoven, NL

Dr. Sang-Rok Oh
Center for Cognitive Robotics Research, Korea Institute of Science and technology (KIST), Seoul, KR

Conference venue

1. **Palazzo dei Congressi di Pisa**

2. **Railway Station "Pisa Centrale"**

3. **International Airport "Galileo Galilei"**

4. **City Council**

5. **University of Pisa - Rectorship**

6. **Scuola Normale Superiore**

7. **Scuola Superiore S.Anna**

8. **Hospital Santa Chiara**

9. **Piazza dei Miracoli**

10. **San Matteo National Museum**

11. **"Giuseppe Verdi" theatre**

Ground floor plan

i	Reception	
1	Auditorium	425
2	Pacinotti room	230
3	Fermi room	230
90a	Room 90a	90
90b	Room 90b	90
90c	Room 90c	90

First Day June, the 4th 2008			Second Day June, the 5th 2008			Third Day June, the 6th 2008		
07:30 – 08:45	Registration		09:00 – 09:45	Invited Lecture – Prof. Maria Chiara Carrozza		09:00 – 09:45	Invited Lecture – Dr. Sang-Rok Oh	
08:45 – 09:30	Welcome Prof. Dario, Prof. Carrozza, Prof. Bouma		09:45 – 11:00	Parallel Sessions		09:45 – 11:00	Parallel Sessions	
09:30 – 10:15	Invited Lecture – Dr. Etienne Burdet							
10:15 – 10:45	Coffee Break		11:00 – 11:30	Coffee Break		11:00 – 11:30	Coffee Break	
10:45 – 12:00	Parallel Sessions		11:30 – 12:45	Teaser, Posters, Presentation		11:30 – 12:45	Parallel Sessions	Workshops
12:00 – 13:00	Teaser, Posters, Presentations		12:45 – 14:15	Lunch and Posters		12:45 – 14:15	Lunch	
13:30 – 14:45	Lunch and Posters		14:15 – 15:00	Invited Lecture – Prof. Hermann Bouma		14:15 – 15:00		
14:45 – 15:30	Invited Lecture – Prof. Alain Berthoz		15:00 – 16:15	Parallel Sessions	Workshops	15:00 – 16:15	Parallel Sessions	Workshops
15:30 – 16:15	Coffee Break and Posters							
16:15 – 17:30	Parallel Sessions	SIGG – ISG Workshops	16:15 – 16:45	Coffee Break and Posters		16:15 – 16:45	Coffee Break	
			17:00 – 19:00	Visit to the Lab of Biorobotics at Scuola Superiore Sant'Anna		16:45 – 19:00	Social events (visit to the "Piazza dei Miracoli" and the Museum of the Roman ships)	
17:30 – 18:45	ISG General Assembly		20:00 – 22:00	Banquet		19:00 – 20:30	Farewell Party	
18:45 – 19:45	Welcome Cocktail							

07:30 – 08:45	**REGISTRATION**	Ground Floor
08:45 – 09:30	**Welcome - Prof. Dario, Prof. Carrozza, Prof. Bouma**	Auditorium
09:30 – 10:15	**Invited lecture – Dr. Etienne Burdet**	Auditorium
10:15 – 10:45	**Coffee Break**	Ground Floor
10:45 – 12:00	**Parallel sessions**	

Workshop on "Concepts and significance of gerontechnology: past, present, future"

GTECH
Auditorium

Chairs: H. Bouma, J.E.M.H. van Bronswijk

180 - Concepts and significance of gerontechnology: past, present, future. *H. Bouma, V. Taipale, J.L. Fozard, D.G. Bouwhuis, J.E.M.H. van Bronswijk*

142 - Communication technology changes how we age. *J. Fozard, W. Kearns*

159 - Gerontechnology's basics. *J.E.M.H. van Bronswijk, DG. Bouwhuis, J.L. Fozard, H. Bouma.*

156 - User perspective and the development of gerontechnology. *V. Taipale*

165 - Paradigm lost: the social perspective in gerontechnology. *R. Pieper*

187 - Technology acceptance models in gerontechnology. *D.G. Bouwhuis, L. Meesters, J. Berentsen*

Biorobotics for longevity – 1

BRL1
Pacinotti room

Chairs: M. Hedberg, L. Giusti

23 - A new tool for selecting appropriate home care devices for eldelry persons suffering from dementia. *T. Kangastupa, M. Hedberg, K. Mäkelä*

57 - The influence of perceived adaptiveness of a social agent on acceptance by elderly users. *M. Heerink, B. Kröse, V. Evers, B. Wielinga*

90 - Robots as social mediators: a study "in the wild". *L. Giusti, P. Marti*

94 - Trial of robot assisted rehabilitation using robotic pet. *M. Naganuma, T. Tetsui, E. Ohkubo, R. Kimura, N. Kato, S. Sato*

Gerontology – 1

GER1
Fermi room

Chairs: G. Lesnoff-Caravaglia, J. Behan

2 - Enhancing activity levels for older adults. *G. Lesnoff-Caravaglia*

6 - Unattended autonomous surveillance in community-dwelling older adults: a field study. *J. van Hoof, H.S.M. Kort,*

24 - Determining the relationship between sleep and social activity in community dwelling older people. *J. Behan, D. Prendergast, B. Quigley, L. Walsh*

31 – Eye movements of elderly people while riding bicycles. *D. Igari, M. Shimizu, R. Fukuda*

Telemonitoring and telecare – 1

TM&TC1
Galilei room

Chairs: M. Gövercin, K. Nakajima

12 - Caalyx: evidence-based selection of health sensors for elderly telemonitoring. *A. Rodríguez-Molinero, A. Catalá, M. Díaz, J. Rodríguez, E. Fernández de la Puente, A. Tabuenca, J. J. de la Cruz; L. Narvaiza, A. Yuste.*

35 - Data fusion in health smart home: preliminary individual evaluation of two families of sensors. *A. Fleury, M. Vacher, H. Glasson, N. Noury, J-F. Serignat*

47 - Visual fall detection system in home environments. *M. Gövercin, J. Spehr, S. Winkelbach, E. Steinhagen-Thiessen, F.M. Wahl*

54 - Television-operating-state telemonitoring system in caring for elderly people living alone. *K. Nakajima, H. Matsui, T. Motoya, K. Sasaki*

60 - Autonomous system for movement monitoring. *M. Torrent, C. Angulo, C. Raya*

Biomechanics of ageing – 1

BMECH
Room "A"

Chairs: .A. Natali, L. Quagliarella

22 - Mechanical characterisation of soft connective tissues with aging. *A. Natali, P.G. Pavan, E. Carniel, P. Dario*

116 - Effects of galvanic vestibular stimulation on statokinesigrams of the elderly 2. *H. Takada, M. Takada, M. Miyao, K. Tanaka, T. Shiozawa*

139 - Postural balance in hip and knee joint arthroplasty patients. *L. Quagliarella, N. Sasanelli, V. Monaco*

141 - Aging and myocontrol: impact on assistive technology. *E.J. Fimbel*

12:00 – 13:30	**Poster session #1 - Teasers, poster presentations**	POSTER1
	Inclusive design and usability	Ground Floor

19 - An ergonomic approach to computer vision interaction. *P. Ponsa, C. Manresa-Yee, M. Diaz, C. Angulo*

29 - Iso standards for accessible design - development of common basic standards -. *K. Sagawa, K. Kurakata*

44 - A review of product usability index 2004 for rapidly ageing society. *H. Ogi*

68 - The homepage design for the elderly people. *K. H-S. Wang, B-S. Harn*

95 - Designing a familiar technology for elderly people. *C. Leonardi, C. Mennecozzi, E. Not, F. Pianesi, M. Zancanaro*

135 - Washer-dryer for every person: ergonomics and biomechanical interventions. *S. Ishihara, Y. Fujiwara, K. Ishihara*

137 - Usability improvement of the automatic washing-drying machine. *K. Ishihara, R. Nakagawa, S. Ishihara, Y. Fujiwara, H. Sako, M. Naitoh*

151 - Active involvement of older users in the design process of smart home technology.. *I. Bierhoff, P. Panis*

Biorobotics for longevity

21 - Using persona descriptions as a communication tool in interdisciplinary system design. *S.H. Budde, F. Stulp, D.L. Sancho-Pradel*

33 - Prototype development and evaluation for the pressure-relieving system of the regular wheelchairs. *C. Pei, J. Wang, P. Tuan, P. Lin, C. Lin, W. Chi*

53 - Robotic system for gait rehabilitation of stroke patients in the acute phase. *V. Monaco, J. Jung, G. Marcì, S. Bagnato, S. Micera.*

97 - Development of oral-rehabilitation robot. *H. Koga, Y. Usuda, M. Matsuno, Y. Ogura, H. Ishii, J. Solis, A. Takanishi, A. Katsumata*

155 - The omni-directional wheelchair for the elderly. *H-T. Fan, T-L. Lee, C-H. Chien, T-S. Ho*

163 - Digitus: towards a platform for the characterization of the finger biomechanics in fine manipulation. *N. Vitiello, C.M. Oddo, S. Roccella, S. Micera, M.C. Carrozza.*

169 - Neuroexos elbow module: a novel exoskeleton for elbow rehabilitation. *E. Cattin, S. Roccella, N. Vitiello, F. Vecchi, M.C. Carrozza*

170 - Design of the new version of the mechatronic system for motor recovery after stroke (memos). *F. Giovacchini, S. Micera, M.C. Carrozza, P. Dario*

178 - Design of a planar robotic machine for tele-rehabilitation of elderly patients. *D. Accoto, L. Zollo, D. Formica, E. Guglielmelli*

Cognitive ageing and games

58 - Technological assistance tool for elderly´s autonomy enhancing and care-givers support based on the use of portable devices and web. *C. Rodríguez de Pablo, M. Loichate, N. Oses, M. F. González, C. Buiza, J. J. Yanguas*

62 - Social and physiological influences of living with seal robots in an elderly care house for two months. *K. Wada, T. Shibata*

181 - Brain training softwares: is their efficacy real and influenced by age? a preliminary report.. *G. Cavallo, M. Tombini, G. Di Pino, G. Curcio, P.M. Rossini, E. Guglielmelli*

182 - Eldergames: videogames for empowering, training and monitoring elderly cognitive capabilities. *M. Fabregat, L. Gamberini, A. Spagnolli, L. Prontu, B. Seraglia*

183 - Design and development of a mixed reality solution for gerontechnology application. *M.L. Alcañiz Raya, J.A. Gòmez, L. Gamberini, M. Martinelli, L. Prontu, B. Seraglia, D. Varotto*

Engineering of living environments

13 - Privacy and mobility in aging-in-place. *J. Knies, J.E.M.H. van Bronswijk*

17 - Towards an economically acceptable prevention of legionnaire's disease. *F. Franchimon, R.C.G.M. Loonen, J.E.M.H. van Bronswijk*

120 - Managing quality of design for an ageing -in -time project. *A.A.M. van Vliet, T. Borghs*

152 - Aging-in-place with "at ease". *D. Mahoney, E. Mahoney.*

13:30 – 14:45	**Lunch**	Ground Floor
	Poster session # 1 (cont.)	1st Floor.
14:45 – 15:30	**Invited lecture – Prof. Alain Berthoz**	Auditorium

16:15 - 17:30	**Parallel sessions and workshops**	
	Joint workshop on "Future clinical perspectives of Gerontechnology"	WS SIGG-ISG
	organized by the Italian Society of Geriatrics and Gerontologists (SIGG) and the ISG The aim of the workshop is to facilitate the discussion between geriatricians and technologists in order to develop more effective and usable systems to increase the quality of life of elderly people - Introduction to Gerontechnology. *H. Bouma* - Comorbility, fragility, and disability in elderly patients. *R. Bernabei* - Technologies for cognitive disabilities. *L. Odetti, Scuola Superiore Sant'Anna* - Occupational therapy and autonomy in elderly patients. *F. Landi* - Technologies for motor function restoration. *S. Mazzoleni, Scuola Superiore Sant'Anna*	Auditorium
	Workshop on "Financial solutions for an ageing society"	WS FINAGE
	organized by G. Turchetti, Scuola Superiore Sant'Anna - Economic sustainability and alternative funding sources of LTC. *Prof. Luca Beltrametti (Università di Genova)* - Technology and insurance: towards innovative products combinations. *Prof. Giuseppe Turchetti (SSSA)* - The approach of Assicurazioni Generali to LTC: strategies and product innovation. *Speaker TBD* - Questions and Answers	Pacinotti room
	ICT for the ageing society – 1	ICT1
	Chairs: *T. Tamura, N. Charness* 88 - Home healthcare network in the elderly. *T. Tamura, I. Mizukura* 9 - worth in the motivation of aging citizens to purchase a technical product or service. *J. Leikas* 14 - Identifying age differences in technology usage. *M. O'Brien, K. Olson, N. Charness, S. Czaja, D. Fisk, W. Rogers, J. Sharit* 76 - Computer and internet use in the usa: influence of age, attitude, employment status, and education. *N. Charness* 96 - Supporting older adults social network: the design of e-inclusion communication services. *C. Leonardi, C. Mennecozzi, E. Not, F. Pianesi, M. Zancanaro*	Fermi room
	Inclusive design and usability - 1	IDU1
	Chairs: *M. Colombo, K. Sagawa* 20 - Safety and comfort during transfers by lifts. *M. Colombo, A. Summa, C. Miramonti, M. Malnati, A. Mercanti, R. Boccardi, S. Pozzato, M. Guerreri* 28 - Useful field of view for older people. *N. Itoh, K. Sagawa, Y. Fukunaga* 48 - Getting older people involved in the process of ambient assisted living research and development. *C. Leonardi, C. Mennecozzi, E. Not, F. Pianesi, M. Zancanaro* 50 - Usabilty of a sensor based home stroke rehabilitation system for the upper limb. *M. Gövercin, R. Willmann, T. Kraft, G. Lanfermann, E. Steinhagen-Thiessen*	Galilei room
	Gait and ageing – 1	GAIT
	Chairs: *A. Sant'Anna, H. Zabaleta* 39 - Gait unsteadiness analysis from motion primitives. *A. Sant'Anna, W. Ourique de Morais, N. Wickström* 61 - Gait analysis in frequency domain for freezing detection in patients with parkinson's disease. *H. Zabaleta, T. Keller, J.F.M. Massó* 114 - Fall detection and gait analysis in a smart-home environment. *V. Bianchi, F. Grossi, G. Matrella, I. De Munari, P. Ciampolini.* 140 - A fall and loss of consciousness weareable detector. *L. Quagliarella, N. Sasanelli, G. Belgiovine*	Room "A"
17:30 – 18:45	**ISG General Assembly**	Auditorium
18:45 – 19:45	**Welcome Cocktail**	1st Floor

09:00 – 9:45	**Invited lecture – Prof. Maria Chiara Carrozza**	Auditorium
9:45 – 11:00	**Parallel sessions 05_1**	

Assistive Technologies for supporting the elders: a XXI century approach (invited session)
Chairs: *U. Cortés, F. Campana*

143 - K4care: a new intelligent system for home care. *D. Riaño, F. Campana, R. Annicchiarico, S. Ercolani, A. Federici, P. Mecocci*

144 - A new collaborative-shared control strategy for continuous elder/robot assisted navigation.. *C. Urdiales, J. Peula, C. Barrué, E. Pérez, I. Sánchez-Tato, J.C. del Toro, U. Cortés, F. Sandoval, R. Annicchiarico, C. Caltagirone*

145 - A share-it service to elders' mobility using the i-walker. *U. Cortés, A. Martínez-Velasco, C. Barrué, T. Benedico, F. Campana, J. Fernandez, R. Annichiarico*

164 - The teleassistance platform: an innovative technological solution to face the ageing population problem. *E. Cruz-Martín, L. del Árbol-Pérez, L.C. Fernández-González*

ATXXI
Auditorium

Joint WASEDA/SSSA Workshop on BioRobotics (invited session) - 1
Chairs:

149 - Characterization of flow dynamics in intracranial cerebral aneurysm using in vitro modeling techniques. *T. Yagi, Y. Qian, M. Hukushima, A. Kamoda, A. Sato, K. Iwasaki, M. Umezu, H. Takao, Y. Murayama*

130 - Rehabilitation robotics: on the development of a new emg-based control for post-stroke rehabilitation. *B. Cesqui, H.I. Krebs, S. Micera*

59 - Design and evaluation of an amplified walking system for elderly people. *T. Ando, M. Nihei, M.G. Fujie*

160 - An innovative robot-mediated therapy for the upper limb of elderly chronic hemiparetic subjects. *S. Mazzoleni, S. Aliboni, G. Pierini, G. Rossi, B. Cesqui, F. Posteraro, M.C. Carrozza, S. Micera, P. Dario*

184 - Novel polymeric nanosheets for gerontic applications. *S. Takeoka, T. Fujie, Y. Okamura*

WASEDA1
Pacinotti room

Engineering of living environments - 1
Chairs: *H.S.M. Kort, . J.E.M.H. van Bronswijk*

1 - Home living environment design and perceptions of safety of older malaysians. *R.M. Yusuff, S.N. Syed Abdul Rashid, T. Aizan Hamid, M.R. Hussain*

4 - Smart technolgy at home: a mutidisciplinary challenge. *H.S.M. Kort, J. van Hoof*

15 - A systemic approach applied to the design of a strolling corridor for elderly persons with alzheimer's-type dementia. *B. Tondu, N. Bardou*

16 - Realizing end-user values of housing for older adults. *J.E.M.H. van Bronswijk, F. Franchimon, J. Knies, C.E.E. Pernot, G.J. Maas*

27 - Electronic environments – support or burden for the elderly?. *E. Fugger, B. Prazak, A. Hochgatterer*

ELE1
Fermi room

Inclusive design and usability - 2
Chairs: *L. Normie, A. Sixsmith*

69 - Usability analysis of home electronic appliances based on eye tracking and physiological data. *R. Fukuda*

83 - An analysis of information seeking behavior on the web in novice older adults. *N. Sato, N. Nakamichi, M. Sakai, H. Uwano*

93 - Multicriteria design optimisation of accessible products for the ageing population. *L. Normie*

106 - User requirements for ambient assisted living: results of the soprano project. *S. Müller, A. Sixsmith*

IDU2
Galilei room

Gerontology – 2
Chairs: *G. Fernie, L. Lorenzen-Huber*

171 - Technology to reduce institutional cross-infection rates by improving the hand hygiene of caregivers. *G. Fernie, A. Levchenko, G. Hufton.*

104 - Shaping the next generation of gerotechnologists: multidisciplinary gerontology vs. computer science. *L. Lorenzen-Huber, K. Connelly*

123 - Bridging the digital divide: the impact of computer training, internet, and email use on levels of cognition, depression, and social functioning in older adults. *B. Hage*

GER2
Room "A"

11:00 – 11:30	**Coffee Break**	Ground Floor

11:30 – 12:45	**Poster session #2 - Teasers, poster presentations**	POSTER2
	ICT for the ageing society	Ground Floor

ICT for the ageing society

63 - Zigbee communication when building a body sensor network. *J. Parera, C. Angulo, J. Cabestany*

128 - The development of ict based services for ageing peole needs co-operation. *T. Petäkoski-Hult, J. Merilahti, M. Ermes, M. van Gils.*

129 - Effective use of smart home technology to increase well-being. *A. Sponselee, B. Schouten, D.G. Bouwhuis, P.G.S. Rutten*

134 - Close to you: unobtrusive awareness communication to bring family living far apart closer. *J. Yashikida, H. Umemuro*

158 - Towards an informed development practice of ehealth services for the ageing society. *H. Hyppönen*

Telemonitoring and telecare

8 - Effects of partial immersion bath on the physiological parameters of elderly men. *K. Rhee, W. W. Jeong, K. J. Chun*

41 - Zigbee-based wireless homecare system implementation. *C. Lin, P. Tuan, C. Pei.*

45 - The on-line falling self-protection system design. *P-C. Tuan, C. Pei, C. S. Lin*

52 - A data mining system for chronic diseases surveillance for primary care unit in taiwan. *H-M. Hua, T-R. Lee*

65 - Aceelerometer signals analisys using svm and decision tree in daily activity identification. *J. Parera, C. Angulo*

92 - Short message service (sms) as a practical tool for monitoring of home-care therapeutic/rehabilitative programs in elderly. *G. Calcagnini, M. Triventi, E. Mattei, F. Censi, D. Giansanti, G. Maccioni, P. Bartolini, V. Macellari*

136 - Ambient-assisted living and in-home activity monitoring. *G. Virone, A. Sixsmith.*

Technology usage

7 - Access and utilization of computers and the internet among older malaysians. *S. Syed Abdul Rashid, S. T. Chai, M. Hussain*

26 - Computer anxiety and attitudes towards the internet among older malaysians. *M.R. Hussain, S.T. Chai, S.N. Syed Abdul Rashid*

113 - A multidisciplinary view to motivational aspects in gerontechnology. *C. Oppenauer, I. Kryspin-Exner*

Gait and ageing

32 - Gait and posture analysis in elderly people using wireless inertial sensor. *D.E. Pardo, A. Rodriguez-Molinero, C. Angulo*

46 - A wearable accelerometer based platform to encourage physical activity for the elderly. *W.O. de Morais, A. Sant'Anna, N. Wickström*

72 - Evaluation of new concept for balance and gait analysis: patients with neurological disease, elderly people and young people. *J. Merilahti, T. Petäkoski-Hult, M. Ermes, M. van Gils, H. Lahti, A. Ylinen, L. Autio, E. Hyvärinen,J. Hyttinen,*

124 - Automatic measurement of elderly people's spatial gait parameters using computer vision. *X. Parra-Llanas*

Biomechanics of ageing

55 - Features of the emg patterns during walking in young end elderly people: preliminary study. *V. Monaco, A. Ghionzoli, P. Dario, S. Micera*

70 - Evaluation of adaptation to perturbed enviroments in elderly subjects: the inhibitory process in motor control. *B. Cesqui, G. Macrì, S. Micera, P. Dario.*

Gerontology

67 - A methodology for gerontechnology consulting as a response to gerontologists'request. *M. Schaff, V. Rialle, A. Poulain, M. Carré*

81 - Designing e-health systems for chronic disease management for elderly. *N. Bitterman*

99 - Proposal of novel experimental methodology for studies on alzheimer's disease using rat and small mobile robot. *H. Ishii, A. Komura, Y. Masuda, S. Miyagishima, A. Takanishi, N. Iida, H. Kimura*

102 - Determination of effective evaluation parameters on the airway training system wka-1r. *Y. Noh, H. Ishii, J. Solis, K. Hatake, A. Takanishi*

118 - Volunteering: impacts on the psychological well-being of chinese older persons. *S.S.Y. Chan*

12:45 – 14:15	**Lunch**	1st Floor
	Poster session # 2 (cont.)	Ground Floor
14:15 – 15:00	**Invited lecture – Prof. Herman Bouma**	Auditorium

15:00 – 16:15	**Parallel sessions and workshops 05_2**	
	Rehabilitation robotics (invited session) Chairs: 49 - The smart walkers as geriatric assistive device. the simbiosis purpose. *A. Frizera, R. Ceres, J.L. Pons, A. Abellanas, R. Raya* 51 - Feasibility in human machine interfaces for elderly people. *R. Raya, D. Torricelli, E. Rocon, R. Ceres, A. Frizera, J. L. Pons* 66 - Design of a controllable wheelchair ergometer for simulation of real life conditions. *J. Moreno, S. Güimil, J. Gonzáles-Quijano, J. Sánchez, J. Pons, Á. Gil* 74 - Rehabilitation robotics: how old is too old?. *H.I. Krebs, B. Volpe, N. Hogan* 126 - Eye-reach: a multimodal interface based on user intention prediction. *D. Torricelli, I. Bernabucci, M. Goffredo, T. D'Alessio* 177 - Current progress on pathological tremor modeling and active compensation using functional electrical stimulation. *F. Widjaja, C.Y. Shee, D. Zhang, W.T. Ang, P. Poignet*	REHAROB Auditorium
	Workshop: "Health oriented services in ambient assisted living: new opportunities for older Europeans" organized by L. Chiari, University of Bologna Chair: Lorenzo Chiari - Ambient technology to support older people at home; *Pietro Siciliano (Institute for Microelectronics and Microsystems IMM-CNR, Lecce) - scientific coordinator of the NET-CARITY project* - OLDES: a "next generation" home technology for independent, in health, and active elderly; *Giovanni Rinaldi (CUP2000 spa, Bologna) - partner of the OLDES project* - Mixing sensing and action to support independent mobility in daily life activities; *Lorenzo Chiari (DEIS - Università di Bologna) - scientific coordinator of the SENSACTION-AAL project* - Counteracting falls in old age: the SMILING project; *Fiorella Marcellini (Social Gerontology Unit, INRCA, Ancona) - scientific coordinator of the SMILING project* Discussion	WS AALinEU Pacinotti room
	Cognitive ageing and games – 1 Chairs: *J. Leikas, D. Struve* 3 - Aging citizens' experiences of electronic brain games. *J. Leikas, P. Lampila* 84 - Process-oriented versus product-oriented worked examples for training older adults to use interactive systems. *D. Struve* 110 - Assessment of executive functioning using virtual reality: virtual environment grocery store. *T. Parsons, A. Rizzo, J. Brennan, T. Silva, E. Zelinski* 37 - "de klessebessers": a leisure game for dementia. *H. van Rijn, J. van Hoof, P. J. Stappers*	CAG1 Fermi room
	Telemonitoring and telecare - 2 Chairs: *D. Anderson, M. Laila* 77 - Evaluation of a video based fall recognition system for elders using voxel space. *D. Anderson, R. Luke, M. Skubic, J.M. Keller, M. Rantz, M. Aud* 79 - International study & promotion of osteoporosis prevention with finnish bone exercise monitor in sendai city, japan. *A. Sakai, S. Salo* 86 - Study on indoor activity monitoring by using electric field sensor. *S. Tsukamoto, H. Hoshino, T. Tamura* 87 - Utility and feasibility of an electronic tracking system for prevention of wandering in demented elderly patients. *M. Laila, V. Rialle, C. Secheresse, O. Magnillat, C. Brissonneau, F. Alain*	TM&TC2 Galilei room
	Gerontechnology in African Countries (invited session) Chairs: *C. Mba, S. Nair* 173 - Older women in accra, ghana: assessing their general health condition. *C. Mba, L. Yarney.* 174 - Knowledge and attitude of older nigerians towards computers. *U. Okoye* 176 - Population aging in botswana : trends and prospects. *S. Nair.*	AFR Room "A"
16:15 – 16:45	**Coffee break, Poster session # 2 (cont.)**	Ground Floor
17:00 – 19:00	**Visit to the Research Laboratory of Biorobotics at the Scuola Superiore Sant'Anna**	
20:00 – 22:00	**Banquet**	

09:00 – 9:45	**Invited lecture – Dr. Sang-Rok Oh**	Auditorium

9:45 – 11:00	**Parallel sessions and workshops 06_1**	

Engineering of living environments - 2

Chairs: . *J.J.N. Lichtenberg, E. Karol*

38 - Floor heating, cold water system, and resulting legionella disease risks for older persons. *F.J. van Hout, F. Franchimon, J.E.M.H. van Bronswijk.*

162 - The relevance of mobility, socializing and privacy for aging-in-place. *J. Knies, J.E.M.H. van Bronswijk*

167 – Product development for adaptive elderly housing. *J.J.N. Lichtenberg*

190 - Corte roncati: an example of innovation in at service delivery and inclusive building for elderly and disable people. *M. Malavasi, E-J. Hoogerwerf*

191 - Theory and practice: the response of people with neurodegenerative disorders to home design in western australia. *E. Karol, M. Giles*

ELE2
Auditorium

Biorobotics for longevity – 2

Chairs: *T-L. Lee, A. Omer*

154 - A step machine for the elderly with osteoarthritis. *H-T. Fan, T-L. Lee, K-C. Weng, M-L. Liao*

73 - Markerless human motion capture-based exercise feedback system to increase efficacy and safety of elder exercise routines. *G.L. Alexander, T.C. Havens, M. Skubic, M. Rantz, J.M. Keller, C. Abbott*

43 - Simulations for elderly support walking device with humanoid robot. *A. Omer, H. Lim, A. Takanishi*

75 - Human-carrying biped walking vehicle. *K. Hashimoto, Y. Sugahara, H. Sunazuka, M. Kawase, K. Hattori, H.O. Lim, A. Takanishi*

BRL2
Pacinotti room

Inclusive design and usability - 3

Chairs: *A. Sterns, ************

107 - Human factors design of a group activity for people with dimentia. *A. Sterns, H. Sterns, R. Sterns*

119 - User analysis and quality function deployment for the design of four wheeled walker. *K.T. Jung, J.H. Kim, K.J. Chun, B.H. Won, J.S. Hoong*

122 - Comparative study between old and young people's basic characteristics for control device design. *K.T. Jung, B.H. Song, H.B. Shin, K.J. Chun, B.H. Won*

36 - A study on visibility with night driving. *K. Yamanaka, S. Yamamoto, M. Kawakami*

IDU3
Fermi room

ICT for the ageing society – 2

Chairs: *W.F. Chan, H. Umemuro*

103 - A qualitative and quantitative study of information technology usage and quality of life among older persons in hong kong. *W.F. Chan, D.R. Phillips, O.L. Siu*

125 - Older adults and the use of e-health information. *S.J. Czaja, C.C. Lee, S.N. Nair, J. Sharit*

132 - Two-nearly: moderate communication of awareness to connect famillies living far apart. *M. Sorakubo, H. Umemuro.*

133 - Activating communications among family members living far apart by sharing common topics through television. *K. Takashima, H. Umemuro.*

40 - Web-based training of prison professionals for better care and management of older prisoners. *A. Sterns, H. Sterns, C. Sed, R. Sterns, G. Lax*

42 - Activity self-surveying of older adults using smartphones. *A. Sterns, H. Sterns*

ICT2
Galilei room

11:00 – 11:30	**Coffee Break**	Ground Floor

11:30 – 12:45	**Workshop "Ageing Economy: from social responsibility to new business opportunities"**	WS AGECO Auditorium

organized by Gorka Eizmendi, Fatronik Foundation

Turning Silver into Gold. *Mary Furlong Ed.D – MF & Associates President and CEO*

FIK Research: Technology for a better life. *Gorka Eizmendi, Deputy Director of Health an Quality of Life Unit, Fatronik*

AGE. The European Older People's Platform. *Speaker TBD*

Joint WASEDA/SSSA Workshop on BioRobotics (invited session) - 2

Chairs: *A. Menciassi, A. Takanishi*

168 - Design of a hand exoskeleton (handexos) for the rehabilitation of the hand. *S. Roccella, E. Cattin, N. Vitiello, F. Giovacchini, A. Chiri, F. Vecchi, M. C. Carrozza*

186 - Design of a bending module for assembling reconfigurable endoluminal surgical system. *K. Harada, E. Susilo, N. Ng Pak, A. Menciassi, P. Dario*

146 - Application of biped humanoid robot to motion simulation for elderly and disabled people. *H. Kondo, Y. Ogura, H. Aikawa, A. Morishima, J. Shimizu, H.Lim, A. Takanishi*

163 - Digitus: towards a platform for the characterization of the finger biomechanics in fine manipulation. *N. Vitiello, C.M. Oddo, S. Roccella, S. Micera, M.C. Carrozza.*

WASEDA2
Pacinotti room

Engineering of living environments - 3

Chairs: *M. Brink, A.A.M. van Vliet*

ELE3
Fermi room

11 - The living environment in the nursing home for older adults with low vision: development of an environmental observation scale. *M. Sinoo, H. Kort, L. Altena, N. van den Berg, C. van Schie. , J. van de Werken*

18 - An open agent-based home automation system. *M. Brink, A.J. Jessurun, F. Franchimon, J.E.M.H. van Bronswijk*

78 - Effects of led lighting characteristics on visual performance of elderly people.. *M. Yamagishi, K. Yamaba, C. Kubo, K. Nokura, M. Nagata*

91 - Help with monitoring of elderly by using physical activities criteria. *E. Campo, S. Bonhomme, M. Chan, D. Estève*

121 - Dwelling features that facilitate ageing-in -time. *A.A.M. van Vliet*

Telemonitoring and telecare - 3   TM&TC3
Chairs: *B. Kröse, M. Rogante*   Galilei room

101 - Care: context awareness in residences for elderly. *B. Kröse, T. van Kasteren, C. Gibson, T. van der Dool*

105 - Telecare and telehealth care network in taiwan. *C-R . Huang, J-Y. Chang*

109 - Ict for home-based service to maintain the upper limb function in ageing. *M. Rogante, M. Bernabeu, C. Giacomozzi, H. Hermens, B. Huijgen, S. Ilsbroukx, R. Magni, E. Opisso, S. S. Marchese, M. Vollenbroek-Hutten, M. Zampolini, V. Macellari*

112 - Use of a data transmission system for neuropsycological evaluation in adult and elderly patients. *V. Canonico, G. Corbi, G. Conchiglia, F. Fortunato, M. Abitabile, F. Rengo*

| 12:45 – 14:15 | **Lunch** | 1st Floor |

15:00 – 16:15	**Parallel sessions 06_2**	
	Biorobotics for longevity – 3 Chairs: *A. Takanishi, W. Yu* 147 - Design and Evaluation of the new Emotional Expression Head for the ADL assistive Full-body Emotion Expression Humanoid Robot KOBIAN. *N. Endo, S. Momoki, M. Zecca, K. Itoh, A. Takanishi* 157 - Design and evaluation of the soft hand whs-1 for the emotion expression humanoid robot kobian. *M. Zecca, K. Endo, N. Endo, Y. Mizoguchi, T. Kusano, K. Itoh, A. Takanishi* 188 - A robotic system architecture for interactive smart environment. *W. Yu, J-Y. Lee, K. Han, J-C. Sohn, M. Jang, Y-J. Cho* 189 - Network-based robots and user interaction framework. *D.N. To, D-I Kim, B-J You, S-R Oh*	BRL3 Pacinotti room
	Gerontology - 3 Chairs: *W-M. Chi, E. Guglielmelli* 64 - Neural network, bioelectrical impedance and dual-energy x-ray absorptiometry in the assessment of body fat in elderly taiwanese men. *K-C. Hsieh, P-C. Tuan, C. Pei, C.S. Lin, W-M. Chi* 172 - Oep-based evaluation of respiratory rehabilitation in elderly patients after lung resection for nsclc. *G. Magrone, D. Formica, M. Milazzo, E. Gallotta, L. Zollo, E. Guglielmelli, S. Valente, P. Granone, S. Sterzi* 175 - Hearing loss in older adults: perspectives for rehabilitation with customised hearing aids and a follow-up fitting procedure. *A. Natalizia, M. Casale, E. Guglielmelli, F. Salvinelli* 150 - Is there any possiblility that heart transplantation can be replaced by an artificial heart?. *M. Umezu, K. Iwasaki, Y. Qian, T. Yagi, K. Yamazaki, T. Kitano, T. Tokunoc, S. Yamazaki*	GER3 Fermi room
	Cognitive ageing and games - 2 Chairs: *H. van Rijn, P. Marti* 71 - Utilizing montessori and universal design principles to produce a group activity for people with dementia. *A. Sterns, H. Sterns, R. Sterns, G. Lax* 89 - Crafting sensorial stimulation and social exchange in dementia care. *P. Marti, L. Giusti* 98 - Observation and modelling of executive processes and associated dysfunction in aging and dementia for cognitive assistance systems. *A. Serna, V. Rialle, H. Pigot* 161 - Cognitive support for older people from multimedia options. *P. Wright, S. Belt, D. Pham, S. Dimov, D. DeRoure* 111 - In-car messages to promote safer driving for older adults. *M. Zajicek, I-M. Jonsson.* 108 - Who benefits from computer training of cognitive abilities?. *E. Zelinski, P. Housen, K. Yaffe, R. Ruff, R. Kennison, H. W. Mahncke, G. E. Smith*	CAG2 Room 90b
	Telemonitoring and telecare - 4 Chairs: *C. Fischer, L. Chiari* 117 - Towards a biometric-based system for characterisation and rehabilitation of patients with urinary incontinence. *C. Fischer, D. Sancho-Pradel, K. Schill* 127 - A versatile home control and monitoring network. *F. Grossi, V. Bianchi, G. Matrella, I. De Munari, P. Ciampolini* 138 - Dream : emergency monitoring system for the elderly. *G.Bestente, M.Bazzani, A.Frisiello, A.Fiume, D.Mosso, L.M. Pernigotti* 185 - A biofeedback-based portable device to support elderly mobility in the home environment. *L. Chiari, E. Farella, L. Rocchi, L. Benini.*	TM&TC4 Room 90c
16:15 – 16:45	**Coffee break**	Ground Floor
16:45 – 19:00	**Social events** Visit to the "Piazza dei Miracoli"	
19:00 – 22:00	**Farewell party**	