

PROGRAM IPIN 2013

Monday October 28th		UTBM - EDIM	11:00 - 12:30	13:30 - 15:15
07:45 - 08:00	Bus from Hotels to University Campus	Workshop : Location-based Services for Indoor Smart Environments (Room : UTBM) POTORTI FRANCESCO	27483 - Towards online position information integration in a location based services gateway Stefan Knauth, Aliaksei Andrushevich, Alexander Klapproth	27469 - Simple Indoor Routing on SVG Maps Julian Ohrt, Volker Turau
08:00 - 09:00	Registration, Welcome (Room : Grand Amphithéâtre)		27472 - A "smart" multimedia guide for indoor contextual navigation in Cultural Heritage applications Fiammetta Marulli, Angelo Chianese, Vincenzo Moscato, Francesco Piccialli	27622 - Approaches for Device-free Multi-User Localization with Passive RFID Benjamin Wagner and Dirk Timmermann
9:00 - 9:30	Opening Session Grand Amphithéâtre : SPIES François, VERNA Cyrille, PREVOT Olivier, MONTAVON Gyslain, and MAUTZ Rainer		27301 - SensMap: Web Framework for Complex Visualization of Indoor&Outdoor Sensing Systems Milan Simek, Lubomir Mraz, Kimio Oguchi	21312 Near Real Time Heading Drift Correction for Indoor Pedestrian Tracking Based on Sequence Detection Li Yanghuan*, Song Qian, Ma Ming, Gu Yang (China)
9:30 - 10:30	Session Mo1: Keynote 1 - A MEMS Centric Approach Anne Frassati (MOVEA) Grand Amphithéâtre			
10:30 - 11:00	Coffee Break			
	Grand amphithéâtre (GA)	IUT 1	IUT2	STGI B
11:00 - 12:30	Session Mo1-GA: Industrial Session SVERRE HOLM	Session Mo1-IUT1: Signal Strength 1 MOREIRA ADRIANO		
	Scalable Indoor positioning Nicolas Etienne (POLESTAR)	21315 A Microscopic Look at WiFi Fingerprinting for Indoor Mobile Phone Localization in Diverse Environments Farshad Arsham*, Li Jiwei, Marina Mahesh, Garcia Francisco (UK)		
	Enter into the mobile geo-diffusion era Philippe Poullain (AFFINITY)	20929 RSSI Distance Estimation Based on Genetic Programming Gualda Gomez David*, Ureña Ureña Jesús, García Juan, García Enrique, Ruiz Daniel (Spain)		
	Ultrasound for touchless interaction - Tobias Dahl (Elliptic Lab)	21255 Particle filter and smoother for indoor localization Nurminen Henri*, Ristimäki Anssi, Ali-Löytty Simo, Piché Robert (Finland)		
		21301 Optimal RFID Beacons Configuration for Accurate Location Techniques within a Corridor Environment Colin Elizabeth*, Moretto Alain, Hayoz Marc (France)		
12:30 - 13:30	Lunch			
13.30 - 15:15	Session Mo2-GA: Camera and Motion 1 TILCH SEBASTIAN	Session Mo2-IUT1: Signal Strength 2 CANALDA PHILIPPE	Session Mo2-IUT2: Inertial smartphone 1 MAKINO HIDEO	Session Mo2-STGIB: Positioning Algorithm 1 LASSABE FREDERIC
	20784 Constrained Object Tracking on Compact One-dimensional Manifolds Based on Directional Statistics Kurz Gerhard*, Faion Florian, Hanebeck Uwe D. (Germany)	21265 Crowdsourced Indoor Localization for Diverse Devices through Radiomap Fusion Laoudias Christos*, Zeinalipour-Yazti Demetrios, Panayiotou Christos(Cyprus)	21296 HiMLoc: Indoor Smartphone Localization via Activity Aware Pedestrian Dead Reckoning with Selective Crowdsourced WiFi Fingerprinting Radu Valentin*, Marina Mahesh(UK)	21263 Cognitive Indoor Positioning in TV White Spaces Caso Giuseppe*, De Nardis Luca, Ferrante Andrea, Di Benedetto Maria-Gabriella (Italy)
	20896 Identification of vehicle tracks and association to wireless endpoints by multiple sensor modalities Becker Daniel*, Einsiedler Jens, Schäufele Bernd, Binder Alexander, Radosch Ilya (Germany)	21303 A Cooperative NLoS Identification and Positioning Approach in Wireless Networks Xiong Zhoubing*, Garello Roberto, Sottile Francesco, Spirito Maurizio(Italy)	21665 A Localization System Using Inertial Measurement Units from Wireless Commercial Hand-held Devices Mikov Aleksandr*, Moschevikin Alex, Sikora Axel (Russia)	21297 Locally Optimal Confidence Ball for a Gaussian Mixture Random Variable Sendorek Pierre*, Charbit Maurice, Abed-Meraim Karim, Legoll Sébastien (France)

	22023 Design of coded reference labels for indoor optical navigation using monocular camera Qaiser Anwar*, Thörnberg Benny, Malik Abdul Waheed (Sweden)	21287 Verification of ESPAR Antennas Performance in the Simple and Calibration Free Localization System Mateusz Rzymowski, Przemysław Woźnica, Łukasz Kulas* (Poland)	20892 Evaluation of Smartphone-based Indoor Positioning Using Different Bayes Filters Hafner Petra, Wieser Manfred, Bernoulli Thomas, Moder Thomas (Austria)	20837 Multi-resolution Localization Algorithm Based On Time Reversal And Simulated Annealing Algorithm Aloui Nadia*, Raouf Kosai, Bouallegue Ammar (French Guiana, Tunisia)
	20838 Reduced-Complexity Data Acquisition System for Image Based Localization in Indoor Environments Liang Jason, Corso Nicholas, Turner Eric, Zakhor Avidoh* (US)	20860 Joint Estimation of Indoor Position and Orientation from RF Signal Strength Measurements Seco Fernando*, Jiménez Antonio, Zampella Francisco (Spain)	20920 Improving Heading Accuracy in Smartphone-based PDR Systems using Multi-Pedestrian Sensor Fusion Marzieh Jalal Abadi* (Australia)	21248 Relevance and Interpretation of the Cramer-Rao Lower Bound for Indoor Localisation Algorithms Kyas Marcel*, Will Heiko, Zhao Yubin (Germany)
15:15 - 15:45	Coffee break			
15.45 - 17.30	Session Mo3-GA: Hybrid for Continuity 1 ROBERTSON PATRICK	Session Mo3-IUT1: Requirements and Application CHATONNAY PASCAL	Session Mo3-IUT2: Inertial unit 1 RENAUDIN VALERIE	Session Mo3-STGIB: Ultrasound System 1 AMIT DVIR
	21319 GPS Line-Of-Sight Fingerprinting for Enhancing Location Accuracy in Urban Areas Uchiyama Akira*, Katsuda Etsuko, Uejima Yuki, Yamaguchi Hirozumi, Higashino Teruo (Japan)	21269 Context Aware Adaptive Indoor Localization using Particle Filter Zhao Yubin*, Yang Yuan, Kyas Marcel (Germany)	21104 Bluetooth Embedded Inertial Measurement Unit for Real-Time Data Collection for Gait Analysis Chandrasiri Ravi, Abhayasinghe Nimsiri*, Murray Iain (Sri Lanka, Australia)	21258 Code Division Positioning by Continuous Signal Using Spread Spectrum Ultrasonic Waves Kumakura Ken*, Suzuki Akimasa, Iyota Taketoshi (Japan) 1 - Soka university (Japan)
	21252 Adaptive Pedestrian Displacement Estimation with a Smartphone for Free Inertial Navigation Renaudin Valerie*, Ortiz Miguel, Demeule Vincent (France)	21151 Accurate Height Estimation Based on Apriori Knowledge of Buildings Gu Yang*, Ma Ming*, Li Yanghuan*, Song Qian* (China)	21220 A Low-Cost Shoe-Mounted Inertial Navigation System with Magnetic Disturbance Compensation Ashkar Rania, Romanovas Michailas, Goridko Vadim*, Schwaab Manuel, Traechtler Martin, Manoli Yiannos (Germany)	21133 Efficient Architecture for Ultrasonic Array Processing based on Encoding Techniques García Rodrigo, Pérez M. Carmen, Hernández álvaro*, Sánchez F. Manuel, Castilla José M., Diego Cristina (Spain)
	21191 Smart indoor-outdoor positioning handover for smartphones Ciurana Marc*, Gonzalez Jesus (Spain)	20543 Key Requirements for Successful Deployment of Positioning Applications in Industrial Automation Thrybom Linus*, Gidlund Mikael, Neander Jonas (Sweden)	21330 Optimal Sampling Frequency and Bias Error Modeling For Foot-Mounted IMUs Munoz Diaz Estefania*, Heirich Oliver, Khider Mohammed, Robertson Patrick (Germany)	21274 Accurate Smartphone Indoor Positioning Using Non-Invasive Audio Lopes Sérgio Ivan*, Vieira José*, Reis João, Albuquerque Daniel*, Carvalho Nuno Borges (Portugal)
	21266 Health Monitoring of WLAN Localization Infrastructure using Smartphone Inertial Sensors Haider Raja Umair, Laoudias Christos*, Panayiotou Christos (Sweden,Cyprus)	21051 Bandwidth and Storage Reduction of Radio Maps for Offline WLAN Positioning Wirola Laura, Piché Robert, Wirola Lauri* (Finland)	21202 Stochastic Cloning Unscented Kalman Filtering for Pedestrian Localization Applications Fazel Amirhosseini Sara, Romanovas Michailas*, Schwarze Tobias, Schwaab Manuel, Traechtler Martin, Manoli Yiannos (Germany)	20722 Locating and classifying of objects with a compact ultrasonic 3D sensor Christian Walter*, Schweinzer Herbert (Austria)
17:30 - 18:25	Demonstrations - CANALDA PHILIPPE			
	27103 - Virtual Testbed for Indoor Localization Adler, Simon Schmitt, Heiko Will, Thomas Hillebrandt, Marcel Kyas (Berlin, Germany)	26948 - RSSI-based Indoor Localization in Low-Power Sensor Networks Ali Golestani, Neda Petreska, Christopher Zimmer (Fraunhofer ESK, Germany)	27031 - SmartActionSLAM in Action: A Stand-Alone Smartphone Application for Tracking in Home Environments Dario Caraci, Frederik Hess, Michael Hardegger, Sinziana Mazilu, Gerhard Traster (Zurich, Switzerland)	27017 - A Scalable Distributed Positioning System Augmenting WiFi Technology Stefano Maddio, Marco Passafiume, Alessandro Cidronali, Gianfranco Manes (Firenze, Italy)
	27014 - Magnetic SLAM in conjunction with FootSLAM Maria Garcia Puyol, Patrick Robertson, Mohammed Khider, Martin Frassl, Michael Angermann, Michael Lichtenstern, Luigi Bruno, Brian Julian, Marek Doniec (Bonn, Germany)	26989 - Demo: Accurate Distance Measurement using the TIME DOMAIN P410 UWB Radio Zakaria Kasmi, Abdelmoumen Norrdine, arnd Sieprath, Joerg Blankenbach (Aachen, Germany)	26956 - Indoor Self-Localization in a WSN, based on Time Of Flight: Demonstrator Rejane Dalce (Toulouse, France)	UWB RTLS For Indoor Positioning Jonathan Horne (DR2 Technologies, Brookline, USA)
	21241 - Accurate Ranging Measurement using Time Domain P410 UWB radio Kasmi Zakaria, Abdelmoumen Norrdine, Arndt Sieprath, Joerg Blankenbach (Aachen, Germany)	20830 - Simultaneous and Hierarchical Multi-Positioning System (Montbéliard-France, Tunisia) Akram SALEM, Philippe Canalda, Francois SPIES, Sami TABBANE	21048 - 2D-indoor localisation with GALILEO-like pseudolite signals Augustin Monsaingeon, Jean-Pascal Julien, Alexis Valleraud, Marc Boyer (Insiteo, France)	Anyplace: Indoor Positioning and Navigation in the Big-Data Era Christos Laoudias (Nicosia, Cyprus)

	Multipath-Assisted Indoor Navigation and Tracking (MINT) Paul Meissner, Manuel Lafer, Erik Leitinger, and Klaus Witrisal (Graz University of Technology, Austria)	21888 - Deploying and Adapting a Multi-Positioning System, Wi-Fi and QR-TAG based, in a Sportive Arena with Unstable Access-Points and Automatic RSSI Fingerprint Refreshments MOFFO DERMAS, Philippe CANALDA, Francois Spies (Université de Franche-Comté, France)		
18:25 -	Bus from University Campus to Axone Center			
18:30 - 20:30	Welcome event and Ice breaks at Axone Center			
20:30 -	Bus from Axone Center to Hotels			
Tuesday October 29th				
08:30 - 09:00	Registration			
08:45 - 09:00	Bus			
	Session Tu1: Keynote 2 : Perspectives and Challenges to Deliver Ubiquitous Indoor Positioning Lionel Garin (Qualcomm)			
09:00 - 10:00	Coffee Break			
10:00 - 10:30				
10.30 - 12:00	Session Tu1-GA: Time of Flight 1 CAMINADA ALEXANDRE 20792 Robust Tracking of a Mobile Receiver using Unsynchronized Time Differences of Arrival Bordoy Joan, Hornecker Patrick, Höflinger Fabian, Wendeberg Johannes*, Zhang Rui, Schindelbauer Christian, Reindl Leonhard (Germany)	Session Tu1-IUT1: Ultra Wide Band BLANKENBACH JOERG 22063 Experimental Evaluation of UWB Real Time Positioning for Obstructed and NLOS Scenarios Al-Qahtani Khaled*, Muqabel Ali, Johar Umar, Al-Ahmari A, Landolsi M (Saudi Arabia)	Session Tu1-IUT2: Inertial unit 2 RENAUDIN VALERIE 21150 Low-cost Miniaturized Foot-mounted Pedestrian Navigation System Song Qian*, Li Yanghuan, Ma Ming, Zhou Zhi-Min (China)	Session Tu1-STGIB: Ultrasound System 2 ALBUQUERQUE DANIEL 20902 Smart Phone Localization Method using Dual-carrier Acoustic Waves Akiyama Takayuki*, Nakamura Masanari, Sugimoto Masanori, Hashizume Hiromichi (Japan)
	20691 Deriving 2D TOA/TDOA IEEE 802.11 g/n/ac Location Accuracy From An Experimentally Verified Fading Channel Model Keuncke Kristoph* (Germany)	20856 Texture-Based Algorithm to Separate UWB-Radar Echoes from People in Arbitrary Motion Sakamoto Takuya*, Sato Toru, Aubry Pascal, Yarovoy Alexander (Japan, Netherlands)	20576 A Belt Mounted IMU With Enhanced Distance Estimation For Pedestrian Indoor Positioning Patarot Alexandre*, Boukallel Mehdi, Lamy Sylvie, Vervisch-Picois Alexandre (France)	20930 Ultrasonic LPS Adaptation for Smartphones Gualda Gomez David*, Pérez Maria, Ureña Ureña Jesús, García Juan, Ruiz Daniel, García Enrique, Lindo Alejandro (Spain)
	21136 System-Level Performance Analysis for Bayesian Cooperative Positioning: From Global to Local Zhang Siwei*, Raulefs Ronald, Dammann Armin, Sand Stephan (Germany)	20924 An UWB based indoor compass for accurate heading estimation in buildings Norrdine Abdelmoumen*, Blankenbach Joerg, Grimm David, Wieser Andreas (Germany, Switzerland)	20992 A Gyroscope Based Accurate Pedometer Algorithm Jayalath Sampath, Abhayasinghe Nimsiri*, Murray Iain (Sri Lanka, Australia)	20697 New pseudo-orthogonal family of polyphase codes to improve Doppler resilience Paredes José*, Aguilera Teodoro, Álvarez Fernando, Fernández Juan, Morera Jorge (Spain)
	20947 Infrastructure-less TDOA-based Indoor Positioning with Radio Waves Aydogdu Canan*, Tokar Kadir, Kozak Ilkay (Turkey)	20931 Performance Comparison of a TDMA- and CDMA-based UWB Local Positioning System Poudereux Pablo, García Enrique*, Hernández Álvaro, García Juan, Ureña Ureña Jesús (Spain)	21295 A sensor-centric EKF for inertial-aided visual odometry Kleinert Markus*, Stilla Uwe (Germany)	21354 Indoor Positioning using Time of Flight Fingerprinting of Ultrasonic Signals Dvir Amit*, Benmoshe Boaz, Ploit Shamir, Levi Harel (Israel)
12:00 - 13:00	Industry panel			
12:50 - 13:50	Lunch			
	Oral Poster session (Room: Grand Amphithéâtre) CHARLET DAMIEN			
13:50 - 14:30				
	21694, 21316, 21298, 21240, 21239, 21235, 21229, 21221, 21147, 21130, 21106, 21076, 21072, 21070, 21045, 21003, 20876, 20875, 20871, 20859, 20830, 20828, 20791			
14:30 - 16:15	Session Tu2-GA: Camera and Motion 2 MAUTZ RAINER 21331 Visual Landmark Based Positioning Chao Hui*, Das Saumitra, Holm Eric, Krishnamo	Session Tu2-IUT1: Signal Strength 3 KNAUTH STEFAN 21307 Removing Useless APs and Fingerprints from WiFi Indoor Positioning Radio Maps Eisa Samih*, Peixoto João, Meneses Filipe, Moreira Adriano (Portugal)	Session Tu2-IUT2: Inertial unit 3 VERVISCH-PICOIS ALEXANDRE 20883 Stance Phase Detection using Hidden Markov Model in Various Motions Ju Ho Jin*, Park Chan Gook, Lee Min Su (South Korea)	Session Tu2-STGIB: Positioning Algorithm 2 CASO GIUSEPPE 21222 On-Line Training of the Path-Loss Model in Bayesian WLAN Indoor Positioning Bruno Luigi*, Khider Mohammed, Robertson Patrick (Germany)

	20683 Refinement of Coarse Indoor Models using Peter Michael*, Khosravani Ali, Fritsch Dieter (Germany)	21304 Large Scale Indoor Wi-Fi Localization using Representative Access Points Jeon Seokseong*, Bak Sangwook, Yu Chansu, Young-Joo Suh, Han Dongsoo (South Korea)	20840 Adaptive Pedestrian Activity Classification for Indoor Dead Reckoning Systems Khalifa Sara*, Hassan Mahbub*, Seneviratne Aruna* (Australia)	21270 2D Geometrical Performance for Localization Algorithms from 3D Perspective Zhao Yubin*, Yang Yuan, Kyas Marcel (Germany)
	21289 Indoor navigation assistance with a Smartp Elloumi Wael*, Guissous Kamel, Chetouani Aladin	20763 Using Double-peak Gaussian Model to Generate Wi-Fi Fingerprinting Database for Indoor Positioning Chen Lina*, Li Binghao, Miao Chunyu, Zhao Jianmin (China, Australia)	21261 Pedestrian Activity Classification to Improve Human Tracking and Localization Bocksch Marcus*, Seitz Jochen*, Jahn Jasper* (Germany)	20872 A Grid-scan Maximum Likelihood Estimation with A Bias Function for Indoor Network Localization Yang Yuan*, Zhao Yubin, Kyas Marcel (Germany)
	20888 Vehicle Positioning System based on passive planar image markers Borstell Hagen*, Pathan Saira, Cao Liu, Richter Klaus (Germany)	21327 Implementation of OGC WFS floor plan data for enhancing accuracy and reliability of Wi-Fi fingerprinting positioning methods Zinkiewicz Daniel* (Poland)	20839 Pedestrian Dead Reckoning Using Adaptive Particle Filter to Human Moving Mode Akiyama Takayuki*, Ohashi Hiroki, Sato Akiko, Nakahara Goh, Yamasaki Katsuya (Japan)	21168 Localization with Heterogeneous Information via Sparse Kernel Recovery Macagnano Davide*, Destino Giuseppe* (Finland)
16:15 - 16:45	Coffee Break and stand-up Poster session 1 and demonstrations (Room: restaurant)			
16:45 - 18:20	Session Tu3-GA: Time of Flight and Signal Strength BAALA OUMAYA	Session Tu3-IUT1: Camera, Light and Motion LAOUDIAS CHRISTOS	Session Tu3-IUT2: RFID WAGNER BENJAMIN	Session Tu3-STGIB: Global Navigation Satellite System and Pseudolite 1 MONSAINGEON AUGUSTIN
	20328 An ubiquitous positioning system based on IEEE 802.15.4 radio signals Rolando Alberto, Amoruso Emanuele* (Italy)	21249 Efficient and adaptive Generic object detection method for indoor navigation Rajakaruna Nimali*, Murray Iain (Australia)	20773 An Integrative Weighted Path Loss and Extreme Learning Machine Approach to RFID based Indoor Positioning Zou Han*, Xie Lihua, Jia Qing-Shan, Wang Hengtao (Singapore, China)	21164 Positioning in GPS Challenged Locations ? The NextNav's Metropolitan Beacon System Meiyappan Subramanian*, Raghupathy Arun*, Pattabiraman Ganesh* (United States)
	20659 Bayesian filters for ToF and RSS measurements for indoor positioning of a mobile object Galov Aleksandr*, Moschevikin Alex (Russia)	21326 Hidden Markov Based Hand Gesture Classification and Recognition Using an Adaptive Threshold Model Mechanicus Jeroen*, Spruyt Vincent*, Ceulemans Marc, Ledda Alessandro*, Philips Wilfried (Belgium)	20677 RFID System with Tags Positioning based on Phase Measurements Shirokov Igor* (Ukraine)	20692 Design of New Codes for Reducing Interference Between GNSS-Like Signals Transmitted Indoors Selmi Ikhlas*, Samama Nel (France)
	21244 WSN-based Passenger Localization in severe NLOS Environments using SDP Weber Richard*, Gosda Uwe, Michler Oliver, Ringel Julia (Germany)	20747 Indoor Positioning Using a High-speed, Fish-eye Lens-Equipped Camera in Visible Light Communication Nakazawa Yohei*, Makino Hideo, Nishimori Kentaro, Wakatsuki Daisuke, Komagata Hideki (Japan)	21250 Device-Free 3-Dimensional User Recognition utilizing passive RFID walls Wagner Benjamin*, Timmermann Dirk (Germany)	21278 Precise Positioning for a Virtually Synchronized Pseudolite System Puengnim Anchalee*, Patino Lucila*, Thielecke Joern, Rohmer Günter (Germany)
	21328 Indoor Positioning using Wi-Fi -- How Well Is the Problem Understood? Mikkel Baun Kjærgaard, Allan Stisen, Thor Siiger Prentow, Henrik Blunck, Kaj Grønabæk, Christian Jensen (Dresden, Germany)		21101 Enhancing Cluster-based RFID Tag Localization Using Artificial Neural Networks and Virtual Reference Tags Soltani Mohammad*, Motamedi Ali*, Hammad Amin (Canada)	20783 A New Approach for Decimeter Accurate GNSS Indoor Positioning Using Carrier Phase Measurements Vervisch Alexandre*, Selmi Ikhlas*, Samama Nel* (France)
18:30 - 19:00	Bus from University Campus to City Center			
19:00 - 20:30	Guided Tour of Belfort			
22:30 -	Bus from Belfort Center to Hotels			
Wednesday, October 30th				
08:30 - 09:00	Registration			
08:45 - 09:00	Bus from Hotels to University Campus			
09:00-10:00	Session We1: Keynote Speaker 3: Active Transport: A New Challenge for Indoor Navigation Valérie Renaudin (IFSTTAR)			
10:00 - 10:30	Coffee Break			
10:30 - 12:15	Session We1-GA: Time of Flight 2 MENESES FILIPE	Simultaneous Localization And Mapping 1 GALLAGHER THOMAS	Robot and Navigation MIROWSKI PIOTR	Audio System 1 SVERRÉ HOLM

	20785 Potentials and Limitations of WIFI-Positioning Using Time-of-Flight Schauer Lorenz*, Maier Marco, Dorfmeister Florian (Germany)	20885 ActionSLAM in Android: At-Home Tracking with a Fully Wearable System Hardegger Michael*, Mazilu Sinziana, Caraci Dario, Hess Frederik, Roggen Daniel, Tröster Gerhard (Switzerland, United Kingdom)	20636 On-board navigation system for smartphones Togneri Mauricio*, Deriaz Michel (Switzerland)	20844 Sound Positioning Using a Small Scale Linear Microphone Array Pei Ling*, Chen Liang, Guinness Robert, Liu Jingbin, Kuusniemi Heidi, Chen Yuwei, Chen Ruizhi (China, Finland, United States)
	20700 Indoor Self-Localization in a WSN, based on Time Of Flight: Propositions and Demonstrator Dalce Rejane*, Van Den Bossche Adrien, Val Thierry (France)	21216 Observability of Path Loss Parameters in WLAN-Based Simultaneous Localization and Mapping Bruno Luigi*, Robertson Patrick (Germany)	21292 Design and Performance Analysis of an Indoor Position Tracking Technique for Smart Rollators Nazemzadeh Payam*, Macii David, Fontanelli Daniele, Rizano Tizar, Palopoli Luigi (Italy)	21306 Voice radio communication, pedestrian localization, and the tactical use of 3D audio Nilsson John-Olof*, Schüldt Christian, Händel Peter (Sweden)
	21128 Accurate positioning in underground tunnels using Software-Defined-Radio Pereira Fernando Pereira Fernando, Theis Christian, Reis Cunha Sérgio, Ricardo Manuel (Switzerland,Portugal)	20699 Survey of accuracy improvement approaches for tightly coupled ToA/IMU personal indoor navigation system Maximov Vladimir*, Tabarovsky Oleg (Russia)	21044 A Self-localization Estimation Method with Cooperating Small Robots Using Camera Positioning and Movable Landmarks Eri Homma*, Naoki Tatebe, Toshinori Kagawa, Kiyohiko Hattori (Japan)	20863 Acoustic Local Positioning System using an iOS Device Aguilera Teodoro*, Paredes José Antonio, Álvarez Fernando, Suárez José, Hernández Álvaro (Spain)
	21273 Indoor positioning using time difference of arrival between multipath components Gentner Christian*, Thomas Jost (Germany)	21288 Simultaneous Localization and Mapping for Pedestrians using Distortions of the Local Magnetic Field Intensity in Large Indoor Environments Robertson Patrick*, Frassl Martin, Angermann Michael, Doniec Marek, Julian Brian, Garcia Puyol Maria, Khider Mohammed, Lichtenstern Michael, Bruno Luigi (United States,Germany)	21282 Enhanced View-based Navigation for Human Navigation by Mobile Robots Using Front and Rear Vision Sensors Tanaka Masaaki Tanaka Masaaki, Hagiwara Yoshinobu, Mizuchi Yoshiaki, Suzuki Akimasa, Imamura Hiroki (Japan)	21259 Sound Based Indoor Localization - Practical Implementation Considerations Moutinho João*, Freitas Diamantino, Araujo Rui (Portugal)
12:15 - 13:15	Lunch			
13:15 : 15:00	Session We2-GA: Light WIESER ANDREAS	Session We2-IUT1: Signal Strength 4 CYPRIANI MATTEO	Session We2-IUT2: Inertial and Magnetic 1 HOMMA ERI	Session We2-STGIB: Global Navigation Satellite System and Pseudolite 2 SAMAMA NEL
	20627 Light-Matching: a new Signal of Opportunity for Pedestrian Indoor Navigation Jimenez Ruiz Antonio*, Zampella Francisco, Seco Fernando (Spain)	21305 Adapting Gaussian Processes for Cross-Device Wi-Fi Localization Yen Hsiao-Chieh*, Wang Chieh-Chih* (Taiwan)	21225 Characterization of Planar-Intensity Based Heading Likelihood Functions for 3-Axes Magnetometers in Magnetically Disturbed Indoor Environments Khider Mohammed*, Robertson Patrick, Frassl Martin, Angermann Michael, Bruno Luigi, Garcia Puyol Maria, Munoz Diaz Estefania, Heirich Oliver (Germany)	21138 Techniques and Architecture to Enhance GNSS Signal Acquisition and Tracking Sensitivity Tangudu Jawaharal*, Ramasubramanian Karthik*, Subburaj Karthik*, Chomal Sunil*, Saurabh Khanna* (India)
	21338 Pedestrian Detection and Positioning System by a New Multi-Beam Passive Infrared Sensor Canals Raphael*, Yin Peng, Deschamps De Paillette Thierry, Zisa Joseph (France)	21279 Single-channel versus multi-channel scanning in device-free indoor radio localization Cassarà Pietro*, Potorti Francesco*, Barsocchi Paolo*, Nepa Paolo* (Italy)	21131 IMU Integration for Kinematic Localization based on a magnetic Indoor Positioning System Hellmers Hendrik*, Norrdine Abdelmoumen*, Blankenbach Jörg*, Eichhorn Andreas (Germany)	20690 GNSS-Based Calibration of the Infrastructure of the Repealite Indoor Positioning System Selmi Ikhlas*, Vervisch-Picois Alexandre*, Gottesman Yaneck*, Samama Nel* (France)
	20858 Multipath Mitigation for a Phase-Based Infrared Ranging System Applied to Indoor Positioning Salido-Monzú David*, Martín-Gorostiza Ernesto, Lázaro-Galilea José Luis, Wieser Andreas, Domingo-Perez Francisco (Spain, Switzerland)	20689 Impact of APs Removal on Accuracy of Fingerprinting Localization Algorithms Machaj Juraj*, Brida Peter (Slovakia)	20298 Robust Step Occurrence and Length Estimation Algorithm for Smartphone-Based Pedestrian Dead Reckoning Kang Wonho*, Nam Seongho, Han Youngnam, Lee Sookjin (South Korea)	21048 2D-indoor localisation with GALILEO-like pseudolite signals Monsaigne Augustin*, Julien Jean-Pascal, Vallemraud Alexis, Boyer Marc (France)
	20746 Study of the shafting vibration of rotary-laser transmitter for workspace measurement positioning system Liu Zhexu*, Zhu Jigui, Ren Yongjie, Lin Jiarui (China)	20517 Device-Free Localization using Redundant 2.4 GHz Radio Signal Strength Readings Fink Andreas*, Beikirch Helmut (Germany)		20274 First Theoretical Aspects of a Cm-accuracy GNSS-based Indoor Positioning System Lu Ye*, Vervisch-Picois Alexandre, Samama Nel (France)
15:00 - 15:30	Coffee Break and stand-up Poster session 2 (Room: Restaurant) and Demonstrations			
15:30 - 17:15	Session We3-GA: Best papers SPIES FRANCOIS	Session We3-IUT1: Wireless Sensor Network, Wi-F BLOCH CHRISTELLE	Session We3-IUT2: Inertial and Magnetic 2 KHIDER MOHAMMED	Session We3-STGIB: HYB indoor 1 TATSUYA IWASE

		21751 For a Better Characterization of Wi-Fi-based Indoor Positioning Systems Lassabe Frédéric*, Cypriani Matteo, Spies François, Canalda Philippe (France)	20745 An Improved Indoor Localization Method Using Smartphone Inertial Sensor Qian Jiuchao*, Peilin Liu, Jiabin Ma, Rendong Ying (China)	20684 Investigating effective methods for integration of building's map with low cost inertial sensors and wifi-based positioning Khan Irshan*, Syrjarinne Jari (Finland)
		20788 Optimal Placement of Multiple Sensors for Localization Applications Kirchhof Nicolaj* (Germany)	20748 Scalable and Accurate Indoor Positioning on Mobile Devices Naguib Ayman*, Pakzad Payam, Palanki Ravi, Poduri Sameera, Chen Yin (United States)	21232 A Scalable Distributed Positioning System Augmenting WiFi Technology Maddio Stefano*, Passafiume Marco, Cidronali Alessandro, Manes Gianfranco (Italy)
		21188 Source localisation by sensor array processing using a sparse signal representation Lardies Joseph*, Berthillier Marc (France)	21339 Using Barometer to Determine the Altitude for Indoor Positioning Li Binghao*, Harvey Bruce, Gallagher Thomas (Australia)	20752 Robust indoor positioning fusing PDR and RF technologies: The RFID and UWB case Zampella Francisco*, Jimenez Ruiz Antonio*, Seco Fernando* (Spain)
		20642 Divided Difference Kalman Filter for Indoor Mobile Localization Benkouider Yasmine Kheira*, Keche Mokhtar*, Abed-Meraim Karim* (Algeria,France)		20894 Robust indoor localization and navigation using optimal fusion filter for sensors and map layout information Aguilar Herrera Jose* (East Germany)

17:15 - 18:10

Demonstrations - CANALDA PHILIPPE

		27103 - Virtual Testbed for Indoor Localization Adler, Simon Schmitt, Heiko Will, Thomas Hillebrandt, Marcel Kyas (Berlin, Germany)	26948 - RSSI-based Indoor Localization in Low-Power Sensor Networks Ali Golestani, Neda Petreska, Christopher Zimmer (Fraunhofer ESK, Germany)	27031 - SmartActionSLAM in Action: A Stand-Alone Smartphone Application for Tracking in Home Environments Dario Caraci, Frederik Hess, Michael Hardegger, Sinziana Mazilu, Gerhard Traster (Zurich, Switzerland)	27017 - A Scalable Distributed Positioning System Augmenting WiFi Technology Stefano Maddio, Marco Passafiume, Alessandro Cidronali, Gianfranco Manes (Firenze, Italy)
		27014 - Magnetic SLAM in conjunction with FootSLAM Maria Garcia Puyol, Patrick Robertson, Mohammed Khider, Martin Frassl, Michael Angermann, Michael Lichtenstern, Luigi Bruno, Brian Julian, Marek Doniec (Bonn, Germany)	26989 - Demo: Accurate Distance Measurement using the TIME DOMAIN P410 UWB Radio Zakaria Kasmî, Abdelmoumen Norrdine, arnd Sieprath, Joerg Blankenbach (Aachen, Germany)	26956 - Indoor Self-Localization in a WSN, based on Time Of Flight: Demonstrator Rejane Dalce (Toulouse, France)	UWB RTLS For Indoor Positioning Jonathan Horne (DR2 Technologies, Brookline, USA)
		21241 - Accurate Ranging Measurement using Time Domain P410 UWB radio Kasmi Zakaria, Abdelmoumen Norrdine, Arndt Sieprath, Joerg Blankenbach (Aachen, Germany)	20830 - Simultaneous and Hierarchical Multi-Positioning System (Montbéliard-France, Tunisia) Akram SALEM, Philippe Canalda, Francois SPIES, Sami TABBANE	21048 - 2D-indoor localisation with GALILEO-like pseudolite signals Augustin Monsaigeon, Jean-Pascal Julien, Alexis Valleraud, Marc Boyer (Insiteo, France)	Anyplace: Indoor Positioning and Navigation in the Big-Data Era Christos Laoudias (Nicosia, Cyprus)
		Multipath-Assisted Indoor Navigation and Tracking (MINT) Paul Meissner, Manuel Lafer, Erik Leitinger, and Klaus Witrisal (Graz University of Technology, Austria)	21888 - Deploying and Adapting a Multi-Positioning System, Wi-Fi and QR-TAG based, in a Sportive Arena with Unstable Access-Points and Automatic RSSI Fingerprint Refreshments MOFFO DERMAS, Philippe CANALDA, Francois Spies (Université de Franche-Comté, France)		

18:10 - 18:15

Bus from University Campus to Peugeot Museum

18:20 - 19:30

Visit and Ice Breaker inside the Peugeot Museum

19:30 - 23:00

Gala Dinner into Peugeot Museum

23:00 -

Bus from Peugeot Museum to Hotels

Thursday October 31st

08:30 - 09:00

Registration

08:45 -

Bus from Hotels to University Campus

Session Th1: Keynote Speaker: Evaluation of localization systems in ambient assisted living applications (The experience of the EvAAL competition)

09:00 - 10:00

Francesco Potorti (ISTI - CNR)

10:00 - 10:30

10:00 Coffee break

10:30 - 12:15	Session Th1-GA: Simultaneous Localization And Mapping 2 PIRANDA BENOIT	Session Th1-IUT1: Signal Strength 5 CHARLET DAMIEN	Session Th1-IUT2: Hybrid Indoor 2 WIROLA LAURI
	21238 The Construction of an Indoor Floor Plan Using a Smartphone for Future Usage of Blind Indoor Navigation. Jayakody Anuradha* (Austria)	21254 Exploiting RSS Measurements among Neighbouring Devices: a Matter of Trust Della Rosa Francescantonio*, Paakki Tommi, Pelosi Mauro, Nurmi Jari (Finland,Denmark)	21146 IMU-Camera Data Fusion: Horizontal Plane Observation with Explicit Outlier Rejection Panahandeh Ghazaleh*, Jansson Magnus, Hutchinson Seth (Sweden, United States)
	21290 Community Based Approach for Generating Building Layouts Schindhelm Corina Kim*, Linnhoff-Popien Claudia, Janus Florian (Germany)	21206 Wi-Fi-based Positioning in Underground Mine Tunnels Cypriani Matteo*, Delisle Gilles, Hakem Nadir (Canada)	21318 An Enhanced Indoor Positioning System for First Responders Pascucci Federica*, Inderst Federica, Setola Roberto, Delprato Uberto, Luca Faramondi (Italy)
	20743 SignalSLAM: Simultaneous Localization and Mapping with Mixed WiFi, Bluetooth, LTE and Magnetic Signals Mirowski Piotr*, Ho Tin, Macdonald Michael (United States)	21186 WiFi localisation of non-cooperative devices Beder Christian*, Klepal Martin (Ireland)	20686 Reference Navigation System Based on WI-FI Hotspots for Integration With Low-Cost Inertial Navigation System Kamil Mustafa*, Devaux Pierre, Haid Markus, Chobtrong Thitipun, Günes Ersan (Germany)
	20922 Virtual Testbed for Indoor Localization Adler Stephan*, Will Heiko, Hillebrandt Thomas, Schmitt Simon, Kyas Marcel (Germany)	21293 Lighthouse: Precise 802.11-based Localization Siddig Abubakr*, Makki Ahmed*, Bleakley Chris* (Ireland)	20836 Infra-free Indoor Positioning Using only Smartphone Sensors Iwase Tatsuya*, Shibasaki Ryosuke (Japan)
12:15 - 12:45	Closing Session – Steering committee chairman - Next IPIN Event – Thanks to organisation		
12:45 - 13:45	Lunch		
13:45 - 14:00	Bus from University Campus to Montbeliard Center		
14:00 - 15:00	Guided tour of Montbeliard		