

WAF 2026 Program

Each oral presentation will be 10 minutes long, followed by a 10-minute session for questions and discussion. Poster and thesis presentations will be one-page PDFs shown on a projector, accompanied by two-minute oral presentations. Presentations can be in English or Spanish.

Sunday	all day	Participants are encouraged to visit the historic town of Jarandilla de la Vera and the surrounding area. We will meet at the Plaza Mayor at 9 pm to enjoy some tapas. For those arriving early, there are many interesting trekking routes departing from the town, such as the Ruta de los Puentes and the Ruta de Cerro Pino. The Ruta del Puente Jaranda or the Ruta del Emperador, which leads to Yuste. All of these routes are documented in a kiosk at the entrance to the town. We have created a Telegram group, https://t.me/+jAHEs-FXxLE2ZjJk, if you need any additional information
Monday	9:00	Reception and Credentials
	9:30-11:00	S1 Generative AI and Explainability Chair: M. G. Santamarta
		VLN-Pilot: Large Vision-Language Model as an Autonomous Indoor Drone Operator Bessie Dominguez-Dager, Sergio Suescun-Ferrandiz, Felix Escalona, Francisco Gomez-Donoso, Miguel Cazorla. UAL
		Improving on-edge LLM task planning for service robotics through LoRA fine-tuning Alejandro González-Cantón, Miguel A. González-Santamarta, Irene González-Fernández, Francisco J. Rodriguez-Lera. ULE
		Deterministic Control and Confined LLM Reasoning in Task-Oriented Dialogue for Service Robots Álvaro Quintana-Camacho, Juan Diego Peña-Narvaez, José Miguel Guerrero, Francisco Martín-Rico, Rodrigo Pérez-Rodríguez. URJC
		A Local Language-Model-Assisted Replanning Module for PlanSys2 Álvaro Valencia, Francisco Martín Rico, Francisco Miguel Moreno. URJC
		Explainability as debugging tool for AI-powered robotics Jorge Rodriguez, Luis Bote-Curiel, David Roldán, José M. Cañas. URJC
	11:00-11:15	Coffee Break

	11:15-12:45	S2 Robot Navigation and Control Chair: F. Rico
		Validation of a Web-Based Zigzag Route Planner for Agricultural Navigation on a Robotnik Summit XL Luis Prieto-López, Sergio Sánchez de La Fuente, Miguel A. González-Santamarta, Ángel Manuel Guerrero-Higuera, Lidia Sánchez-González, Francisco J. Rodríguez-Lera (ULE)
		Reviving a Legacy Pioneer 2-AT: An Open-Source Retrofit for Outdoor GNSS Navigation with ROS 2 and Nav2 Claudia González Mena, Alberto Tudela, Camilo A. Ruiz-Beltrán, José Galeas, Antonio Bandera (UMA)
		A Digital Shadow Architecture for Real-Time Spatial Synchronization Sergio Suescun-Ferrandiz, Carlos Zambrana-Navajas, Francisco Gomez-Donoso, Miguel Cazorla (UAL)
		Towards autonomous navigation for small indoor drones Alfonso Núñez Ferreiro, Izán Fernández Moreno, Xose R. Fdez-Vidal, Roberto Iglesias Rodríguez (USC)
		Towards the Design of a System to Rescue People Fallen into Artificial Ponds Alberto Tudela, José Galeas, Camilo A. Ruiz-Beltrán, Antonio Bandera (UMA)
	12:45-13:00	Short Break
	13:00-13:45	S3 Robots in Education Chair: J.M. Cañas
		Educational robotics beyond ROS: a custom library for direct transfer of Webots controllers in the Turtlebot3 Jaime P. Pérez-Moro, Alejandro Romero, Hector Quintian, Francisco Bellas (UDC)
		From Prototype to Classroom: Robotito, an Open-Source ROS 2 Teaching Robot Guillermo J. Martos Aguilera, José Galeas, Óscar Pons, Alberto Tudela, Juan P. Bandera Rubio (UMA)
	13:45-16:00	Appetizers, Lunch & Coffee
	16:00-17:00	S4 Representation, Learning and Memory Chair: J. Martínez
		Actionable Scene Graphs Noé Zapata, Pedro Núñez, Pablo Bustos (UEx)
		Building Incremental Memories of Human Activities from Mobile Robot Observations

		Alberto Pérez-Álvarez, Javier Ballesteros-Jerez, Jesus Martínez-Gómez, Ismael García-Varea (UCLM)
		Episodic and semantic memories for causal explanation of perceptual anomalies Pablo Bustos, Jorge Calderón, Álvaro Tardío, Javier Ballesteros-Jerez, Jesus Martínez-Gómez, Ismael García-Varea, José Galeas, Antonio Bandera (UEx, UCLM, UMA)
		Where Was That? Pose-Anchored Semantic Memory for Long-Term Service Robots Alberto Tudela, José Galeas, Antonio Bandera (UMA)
	17:00-17:15	Short Break
	17:15-19:00	Open roundtable discussion
		Subject: The problem of blindness and hallucinations in YOLO and its relationship with world models.
Free Time Cocktail and Dinner starting at 20:30		
Tuesday	10:00-10:40	S6 - Assistive Robotics Chair: J.P. Bandera
		Advancing the Assistive Social Robotics Fleet of the EuroAGE+ Network: A Cross-Platform Analysis Pedro Núñez, Rui P. Rocha, Paulo J. S. Gonçalves (UEx, PCB)
		An Autonomous Attention System for Social Robots Based on Multimodal Reasoning and Behavior Trees Sergio Cobos Blanco, Juan Diego Peña-Narváez, José Miguel Guerrero, Francisco Martín-Rico, Rodrigo Pérez-Rodríguez (URJC)
	10:40-11:40	S7 Manipulation and Control Chair: V. Matellán
		Autonomous Grasp Dynamics and Incipient Slip Compensation using High-Resolution Tactile Sensors Lucas Fuente-Rodríguez, Francisco J. Rodríguez-Lera, Camino Fernández-Llamas, Alexis Gutiérrez-Fernández (ULE)
		Fast Where Safe, Careful Where Risky: Anticipatory Phase Coupling with Per-Segment Precision Learning for Robot Manipulation Pablo Bustos, Jorge Calderón, Alejandro Torrejón, Shahriar Hassan (UEx)

		Teleoperation of Dual-Arm Manipulators via VR Interfaces: A Framework Integrating Simulation and Real-World Control Alejandro Torrejón, Sergio Eslava, Jorge Calderón, Pedro Nuñez, Pablo Bustos (UEx)
	11:40-12:00	Coffe Break
	12:00-12:45	S8 Vision in Robotics Chair: F. Rodríguez Lera
		León Weeds: A Region-Specific Dataset for Weed Instance Segmentation Vicente Barreiro Serrano, Francisco Javier Rodríguez Lera, Miguel Ángel González Santamarta, Vicente Matellán Olivera (UMA)
		Real-time Cosmetic Contact Lens Detection System for Iris Recognition at a Distance Camilo A. Ruiz-Beltrán, Adrián Romero-Garcés, Alberto Tudela, José Galeas, Antonio Bandera (UMA)
	12:45-13:15	REDAF Meeting & Closing
Thesis proposals	Continuous projection and 2 min. presentations (session to be determined)	
Please send the organisation a one-page PDF of the poster.	Multi-Sensor Fusion and Temporal Synchronization for Human Activity Recognition in Human-Robot Collaboration in Precision Agriculture Nelson Broyer Paco Chipana, (UEx)	
	Predictive navigation for agricultural robots Víctor Romero Bautista, (UEx)	
	Explainable AI for medical imaging Jose Luis Garcia Salas, (UEx)	
	Self-Extending Causal-Semantic Memory for Grounded and Self-Correcting Knowledge-Driven Planning in Cognitive Robots Javier Ballesteros-Jerez (UCLM)	
Posters	Continuous projection and 2 min. presentations (session to be determined)	
Please send the organisation a one-page PDF of the poster.	The Use of Robotics in Occupational Therapy for Cognitive Stimulation and the Prevention of Cognitive Decline: A Person-Centred Approach for Older Adults	

	Nerea Aparicio-Diacosta, Alicia Condón-Pérez, Zoraida Clavijo-Chamorro, Trinidad Rodríguez-Domínguez (UEx)
	Evaluating Context-Aware Conversation with a Mobile Social Robot in Residential Care Esther Almendros-Saelices, Javier Ballesteros-Jerez, Jesus Martínez-Gómez, Ismael García-Varea (UCLM)
	Evaluating a Humanoid Social Robot and AI-Generated Adaptive Music Support in Residential Care Esteban Caballero-Morcillo, Javier Ballesteros-Jerez, Jesus Martínez-Gómez, Ismael García-Varea (UCLM)
	Socially Aware Navigation for a Humanoid Waiter Jean Chrysostome Mayoko Biong, Lidia Sánchez-González, Vicente Matellán-Olivera