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CURSOS DE VERANO

UPM SUMMER COURSE 2016

LABORATORY OF IDEAS FOR SAFETY IN AVIATION. LISA “ADDRESSING AVIATION AND ATM SAFETY CHALLENGES”

Dates: July 11th – 14th 2016

Place: UPM Summer School, Real Sitio de San Ildefonso La Granja - Segovia

Dir.: M^a Rosa Arnaldo Valdés



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MONDAY – 11 th OF JULY Setting the scene: Aviation safety research challenges and opportunities Managed by Rosa Arnaldo	
10:00 a 12:00	<p>Introduction to course program & logistics . Laboratory of Ideas for Safety In Aviation: Exchange innovative ideas & collaborative initiatives to address the safety challenges of aviation & ATM. <u>Rosa Arnaldo (UPM)</u> Proyect "Horizontes" <u>Daniel Mosquera Benitez Head of Research, Development and Innovation Area</u> <u>Business Development Division, ISDEFE</u> CANSO Europe Strategy for the Future of Safety in ATM <u>Eduardo García González (CANSO Manager European ATM Coordination and Safety)</u> Safety investigation authorities Priorities <u>Jorge Valero, (CIAIAC)</u></p>
12:00 a 12:30	COFFEE
12:30 a 14:30	<p>Aviation safety research challenges and opportunities from the cockpit perspective. <u>Alvaro Gammicchia (SEPLA)</u> Aviation safety research challenges and opportunities from the ATCO perspective. <u>Gonzalo Martínez (APROCTA)</u> Aviation safety research challenges and opportunities from the industry perspective <u>Eduardo Cuadrado García Chief of Operations/ Test Pilot Airbus Defense and Space, AIRBUS GROUP</u> <u>Jose Insenser Innovation Manager at Airbus Defence and Space</u></p>
14:30 a 16:30	LUNCH
16:30 a 18:30	<p>Introduction to SW for Bayesian Inference (GeNie) (30 min)- 16.00-16.30 ** <u>(Alvaro Rodriguez UPM- Eduardo Sánchez- IBERIA)</u></p> <p>Round Table: This first day will end with a round table / panel discussion with the participation of the speakers of the day and students focussed on key issues regarding the technical topics to be developed during the course:</p> <ul style="list-style-type: none"> • Safety Insight and cleverness, • Safety in operation, • Aviation/ATM Cyber-security <p><u>Moderator : Dirk Schafer</u></p>



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	<p>TUESDAY – 12th OF JULY Technical Session II: Safety Insight and cleverness: or how to identify risks and generate safety intelligence from extensive safety data exploitation." Managed by Rosa Arnaldo</p>
10:00 a 12:00	<p>A framework for aviation safety risk management at state level <u>David Rios (CIEMAT)</u> The Risk Observatory: developing a platform to share aviation safety data and intelligence in Europe <u>Joram Verstraeten . (NLR)</u></p>
12:00 a 12:30	COFFEE
12:30 a 14:30	<p>Big data safety application <u>David Pérez Pérez (CRIDA)</u> ATC Safety incidents analisis and reaction <u>Alvaro Rodriguez (UPM)</u></p>
14:30 a 16:30	<p>LUNCH LISA-Blog Editorial Team Meting *** (30 min)- 16.00-16.30</p>
16:30 a 18:30	<p>Practical exercises: Application of predictive techniques in aviation: exercises with Bayesian Networks applied to real data exploitation. Alvaro Rodriguez (UPM) & Eduardo Sanchez (IBERIA Safety Manager) GeNie SW will be used for practical exercises</p>



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WEDNESDAY – 13 th OF JULY Technical Session I: Dealing with external hazards: Cibersecurity. Managed by Dirk Schaefer	
10:00 a 12:00	<p>Introduction to Cybersecurity Christopher Johnson, University of Glasgow</p> <p>Plenary Disucssion: What are the main Cybersecurity Threats in Aviation and ATM?</p> <p>Improving the Cybersecurity of the ATM Supply Chain Christopher Johnson, University of Glasgow</p> <p>Information security for the transport sector: state of the art and trends Rosana Casar , ISDEFE</p>
12:00 a 12:30	COFFEE
12:30 a 14:30	<p>The regulatory view on cybersecurity José Luis del Carmen Melero, AESA</p> <p>Cybersecurity in SOA architecture (SWIM) María Pilar Torres Bruna, everis</p> <p>Applying Secure Multiparty Computation in ATM Massimiliano Zanin, Innaxis</p> <p>Group brainstorming: application areas of SMC</p>
14:30 a 16:00	LUNCH
	LISA-Blog Editorial Team Meting (30 min) 16.00-16.30
16:00 a 18:30	<p>Groups create posters: application areas of SMC</p> <p>Poster teaser session: SMC Application Areas</p> <p>Cybersecurity at Airbus: " Inflight Entertainment Hacking" Mario Pérez de la Blanca, Airbus</p> <p>Best Poster Award</p>



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THURSDAY – 14th OF JULY Technical Session III: Safety in Operation. Safety and human Performance Managed by Rosa Arnaldo	
10:00 a 12:00	Fatigue and Automation in ATM <u>Neil May, (Head of human Factors NATS)</u> A stress/fatigue -detection system based on physiological signals <u>Gonzalo Bailador (CENTRO DE DOMOTICA INTEGRAL "CEDINT"-UPM)</u>
12:00 a 12:30	COFFEE
12:30 a 14:30	<i>"Implementing fatigue management in a new regulatory environment"</i> · <u>Stéphane DEHARVENGT (DSNA)</u> High Automation Environments: Dealing with overconfidence and fears of automation failures. (SESAR Exploratory Research AUTOPACE Project). <u>Eva Puntero (CRIDA/ Enaire)</u>
14:30 a 16:00	LUNCH
16:00 a 18:00	Jeppesen Fatigue Risk Management Portfolio. <u>Jeppesen Viktor Forsman (Head of Scheduling Safety at Jeppesen)</u> Practical exercises: Understanding fatigue: students fatigue self assessment during the course using APPs for prediction, measurement and mitigation of fatigue.
18:00-18:30	Research Centres vision on aviation safety challenges and opportunities. <u>Kurt Klein (ASDA)</u> Closing act