PURESAFE Final Conference



Report of Contributions

Contribution ID: 1 Type: not specified

REGISTRATION

Monday 19 January 2015 13:30 (30 minutes)

May 24, 2025

Welcome

Contribution ID: 2 Type: not specified

Welcome

Tuesday 20 January 2015 08:50 (10 minutes)

Session Classification: SESSION 2 - SYSTEMS ENGINEERING

Contribution ID: 3 Type: not specified

Overview of the PURESAFE Project

Monday 19 January 2015 14:30 (30 minutes)

Presenter: MATTILA, Jouni (TUT)

Session Classification: SESSION 1 - PURESAFE FINAL CONFERENCE WELCOME

Contribution ID: 4 Type: **not specified**

Robotic Interventions in Scientific Installations: CERN and PURESAFE

Monday 19 January 2015 15:00 (30 minutes)

Presenter: LOSITO, Roberto (CERN)

Session Classification: SESSION 1 - PURESAFE FINAL CONFERENCE WELCOME

May 24, 2025

Contribution ID: 5 Type: **not specified**

The Importance of PURESAFE for the FAIR Facility

Monday 19 January 2015 15:30 (20 minutes)

Presenter: WEICK, Helmut

Session Classification: SESSION 1 - PURESAFE FINAL CONFERENCE WELCOME

Contribution ID: 6 Type: **not specified**

Remote Handling Solutions for Inspecting CERN's General Infrastructure

Monday 19 January 2015 16:20 (20 minutes)

Presenter: MORTON, Richard Francis (CERN)

Session Classification: SESSION 1 - PURESAFE FINAL CONFERENCE WELCOME

Contribution ID: 7 Type: **not specified**

ATLAS Detector Safety and Radiation Protection Problems and Strategy for the Future Shutdowns

Monday 19 January 2015 16:40 (20 minutes)

Presenter: BELTRAMELLO, Olga (CERN)

Session Classification: SESSION 1 - PURESAFE FINAL CONFERENCE WELCOME

Contribution ID: 8 Type: not specified

Challenges of the Third Age of Systems Engineering

Tuesday 20 January 2015 09:00 (50 minutes)

Presenter: SILLITTO, Hillary (University of Bristol)

Session Classification: SESSION 2 - SYSTEMS ENGINEERING

Contribution ID: 9 Type: not specified

Overview of PURESAFE WP1. openSE at a Glance

Tuesday 20 January 2015 09:50 (40 minutes)

Presenter: BONNAL, Pierre (CERN)

Session Classification: SESSION 2 - SYSTEMS ENGINEERING

Contribution ID: 10 Type: not specified

Actor Based Design for a Collaborative Modelling and Simulation System

Tuesday 20 January 2015 11:00 (20 minutes)

Presenter: ROA CASTRO, Laura (École Centrale Paris, France)

Session Classification: SESSION 2 - SYSTEMS ENGINEERING

Contribution ID: 11 Type: not specified

Collaborative Planning and Scheduling: Towards an Application of the ALARA Principle in the Intervention Planning and Scheduling Phase (RP2)

Tuesday 20 January 2015 11:20 (20 minutes)

Presenter: BAUDIN, Mathieu (CERN)

Session Classification: SESSION 2 - SYSTEMS ENGINEERING

Contribution ID: 12 Type: not specified

Monitoring and Measurement of Intellectual Capital Performance Indicators in Complex Systems Development

Tuesday 20 January 2015 11:40 (20 minutes)

Presenter: SKEC, Stanko (U. Zagreb)

Session Classification: SESSION 2 - SYSTEMS ENGINEERING

Contribution ID: 13 Type: not specified

Configuration and Change Process Maturity Improvement (RP05)

Tuesday 20 January 2015 12:00 (20 minutes)

Presenters: NIKNAM, Masoud (KIT, Karlsruhe, Germany); Dr BONNAL, Pierre (CERN)

Session Classification: SESSION 2 - SYSTEMS ENGINEERING

Contribution ID: 14 Type: not specified

Management of Critical Situations Based on the Understanding of Sociotechnical Systems

Tuesday 20 January 2015 14:00 (20 minutes)

Presenter: NAUMANN, Thomas

Session Classification: SESSION 3 - SYSTEMS ENGINEERING

Contribution ID: 15 Type: not specified

RAMS Methods and Tools. From LHC to FCC

Tuesday 20 January 2015 14:20 (20 minutes)

Presenter: VIRTANEN, Seppo (TUT, Tampere, Finland)

Session Classification: SESSION 3 - SYSTEMS ENGINEERING

Contribution ID: 16 Type: not specified

RAMS Engineering and Management for Large Scale Scientific Facilities (RP01)

Tuesday 20 January 2015 14:40 (20 minutes)

Presenter: IMRAM KHAN, Douzi (TUT, Tampere, Finland)

Session Classification: SESSION 3 - SYSTEMS ENGINEERING

Contribution ID: 17 Type: not specified

Interactive Visual Intervention Planning in Particle Accelerator Environments with Ionizing Radiation

Tuesday 20 January 2015 15:50 (20 minutes)

Presenters: FERAL, Bruno (CERN); FABRY, Thomas (CERN)

Session Classification: SESSION 3 - SYSTEMS ENGINEERING

Contribution ID: 18 Type: not specified

Augmented Reality Platform for Advanced Maintenance in Scientific Facilities (RP11)

Tuesday 20 January 2015 15:00 (20 minutes)

Author: DUCEAU, Eric (Airbus Group)

Presenter: MÁRTINEZ, Héctor (Sensetrix)

Session Classification: SESSION 3 - SYSTEMS ENGINEERING

Contribution ID: 19 Type: not specified

Systems Engineering for Healthcare

Tuesday 20 January 2015 16:10 (40 minutes)

Presenter: LE CARDINAL, Julie (École Centrale Paris, France)

Session Classification: SESSION 3 - SYSTEMS ENGINEERING

Welcome

Contribution ID: 20 Type: not specified

Welcome

Wednesday 21 January 2015 08:50 (10 minutes)

Session Classification: SESSION 4 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 21 Type: not specified

Vision for Robotic Manipulation

Wednesday 21 January 2015 09:00 (50 minutes)

Presenter: SICILIANO, Bruno (Univ. Napoli Federico II)

Session Classification: SESSION 4 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 22 Type: not specified

Telerobotic Challenges Addressed by PURESAFE

Wednesday 21 January 2015 09:50 (40 minutes)

Presenter: FERRE, Manuel (UPM, Madrid Spain)

Session Classification: SESSION 4 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 23 Type: not specified

Status of the Target Handling on the pbar-Target at FAIR

Wednesday 21 January 2015 11:00 (20 minutes)

Presenter: HELMECKE, Manuela (GSI, Darmstadt)

Session Classification: SESSION 4 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 24

Type: not specified

On Design and Development of Super Fragment Separator (Super-FRS) Remote Handling Logistics: Systems Engineering Prospective (RP9)

Wednesday 21 January 2015 11:20 (20 minutes)

Presenter: AMJAD, Faraz (GSI, Darmastadt, Germany)

Session Classification: SESSION 4 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 25 Type: not specified

A Systematic Approach to Define, Analyze and Develop Remote Handling Tasks in Radiation Areas (RP7)

Wednesday 21 January 2015 11:40 (20 minutes)

Presenter: ORONA, Luis (GSI, Darmstadt, Germany)

Session Classification: SESSION 4 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 26 Type: not specified

Design for Remote Handling Compatibility at CERN –First Steps

Wednesday 21 January 2015 12:00 (20 minutes)

Presenter: KERSHAW, Keith (CERN)

Session Classification: SESSION 4 - TELEROBOTICS AND REMOTE HANDLING

Welcome

Contribution ID: 27 Type: not specified

Welcome

Thursday 22 January 2015 08:50 (10 minutes)

Session Classification: SESSION 5 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 28 Type: not specified

Human-Robot Interaction And Cooperation

Thursday 22 January 2015 09:00 (50 minutes)

Presenter: CHATILA, Raja (ISIR, UPMC, Paris, France)

Session Classification: SESSION 5 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 29 Type: not specified

Temporal Planning for Robots and Logistics

Presenter: BIT-MONNOT, Arthur (LAAS, CNRS, Toulouse, France)

Contribution ID: 30 Type: not specified

Theory and Implementation of a Family of Novel Real Time Bounded Actuator Motion Controllers for Wheeled Mobile Robots (RP14)

Thursday 22 January 2015 09:50 (20 minutes)

Presenters: GHABCHELOO, Reza (TUT, Tampere, Finland); OFTADEH, Reza (TUT, Tampere, Fin-

land)

Session Classification: SESSION 5 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 31 Type: not specified

Task-based Telemanipulation for Maintenance in Large Scientific Facilities (RP12)

Thursday 22 January 2015 10:10 (20 minutes)

Presenter: OWEN-HILL, Alex (UPM, Madrid, Spain)

Session Classification: SESSION 5 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 32 Type: not specified

Force Feedback Nuclear Telerobotics in France: R&D Results and Industrial Achievements

Thursday 22 January 2015 11:00 (50 minutes)

Presenters: GARREC, Philippe (CEA LIST, Saclay, France); PERROT, Yann (CEA LIST, Saclay,

France)

Session Classification: SESSION 5 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 33 Type: not specified

A Macro-Micro Visual Servoing Controller for Mobile Manipulation (RP10)

Thursday 22 January 2015 11:50 (20 minutes)

Presenters: MATTILA, Jouni (TUT, Tampere, Finland); AREF, Mohammad (TUT, Tampere, Fin-

land); GHABCHELOO, Reza (TUT, Tampere, Finland)

Session Classification: SESSION 5 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 35 Type: not specified

PURESAFE Final Demo

Thursday 22 January 2015 14:00 (1h 50m)

by PURESAFE ESR's and Supervisers

Session Classification: SESSION 6 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 36 Type: not specified

Force Estimation Based on Proprioceptive Sensors for Teleoperation in Radioactive Environment (RP14)

Thursday 22 January 2015 16:20 (20 minutes)

Presenter: DEL SOL, Enrique (Oxford Technologies Ltd.)

Session Classification: SESSION 6 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 37 Type: not specified

Modular robots for maintenance tasks in large scientific facilities

Thursday 22 January 2015 16:40 (20 minutes)

Presenter: SEKHAR PAGALA, Prithvi (UPM, Madrid, Spain)

Session Classification: SESSION 6 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 38 Type: not specified

Wireless Communication Enhancement Methods for Mobile Robots in Scientific Facilities (RP6)

Thursday 22 January 2015 17:00 (20 minutes)

Presenter: NATTANMAI PARASURAMAN, Ramviyas (CERN)

Session Classification: SESSION 6 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 39 Type: not specified

Improving Robotic Remote Manipulation in Smoky and Underwater Hazardous Environments

Thursday 22 January 2015 17:20 (40 minutes)

Presenter: MARÍN, Raúl (U. Jaume-I, Spain)

Session Classification: SESSION 6 - TELEROBOTICS AND REMOTE HANDLING

Welcome

Contribution ID: 40 Type: not specified

Welcome

Friday 23 January 2015 08:50 (10 minutes)

Session Classification: SESSION 7 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 41 Type: not specified

Lessons Learnt from Using the Quince Robot at Fukushima Daiichi Nuclear Power Station

Friday 23 January 2015 09:00 (50 minutes)

Presenter: YOSHIDA, Tomoaki (Chiba Institute of Technology, Japan)

Session Classification: SESSION 7 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 42 Type: not specified

Maintenance and Remote Handling in ITER

Friday 23 January 2015 09:50 (40 minutes)

Presenter: TESINI, Alessandro (ITER Organization, Cadarache, France)

Session Classification: SESSION 7 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 44 Type: **not specified**

Quadrupedal and Bipedal Robot Requirements for Intervention in Complex Human Engineered Environments

Friday 23 January 2015 11:30 (30 minutes)

Presenter: CALDWELL, Darwin (Istituto Italiano di Tecnologia (IIT), Genoa, Italy)

Session Classification: SESSION 7 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 45 Type: not specified

Remote Operations by Fleets of Autonomous Robots: Challenges and Approaches

Friday 23 January 2015 12:00 (30 minutes)

Presenter: LACROIX, Simon (LAAS, CNRS, Toulouse, France)

Session Classification: SESSION 7 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 46 Type: not specified

Telepresence, Mind the Gap!

Friday 23 January 2015 10:30 (30 minutes)

 $\textbf{Presenters:} \ \ \text{ALBU-SCH\"{A}FFER, Alin (DLR-Robotics and Mechatronics Center, Wessling, Germany); \ AR-Robotics Center, Wessling, Germany, Germ$

TIGAS, Jordi (DLR-Robotics and Mechatronics Center, Wessling, Germany)

Session Classification: SESSION 7 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 47 Type: **not specified**

Chalenges and Enabling Technologies for Complex Maintenance and Intervention Robot Missions

Friday 23 January 2015 12:30 (30 minutes)

Presenter: ALAMI, Rachid (LAAS, CNRS, Toulouse, France)

Session Classification: SESSION 7 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 49 Type: not specified

Welcome Address

Monday 19 January 2015 14:00 (30 minutes)

Presenter: SABAN, Roberto (CERN)

Session Classification: SESSION 1 - PURESAFE FINAL CONFERENCE WELCOME

Contribution ID: 51 Type: not specified

When System Engineering meets Virtualization: Feed-back from Airbus initiatives

Tuesday 20 January 2015 16:50 (50 minutes)

Invited Keynote Talk

Presenter: DUCEAU, Eric (Airbus Group)

Session Classification: SESSION 3 - SYSTEMS ENGINEERING

Contribution ID: **52** Type: **not specified**

Practical Experiences from Remote Handling in Fusion

Wednesday 21 January 2015 12:20 (40 minutes)

Presenter: ROLFE, Alan (Oxford Technologies Ltd)

Session Classification: SESSION 4 - TELEROBOTICS AND REMOTE HANDLING

Contribution ID: 53 Type: not specified

Aerial Robotics Manipulation

Thursday 22 January 2015 13:20 (40 minutes)

Presenter: OLLERO, Anibal (Centro Avanzado de Tecnologías Aeroespaciales, Sevilla, Spain)

Session Classification: SESSION 6 - TELEROBOTICS AND REMOTE HANDLING