

WPMAG EUROfusion Final Meeting



Report of Contributions

Contribution ID: **82**

Type: **not specified**

Welcome

Wednesday 14 January 2026 09:00 (15 minutes)

Presenter: SEDLAK, Kamil (EPFL)

Contribution ID: **83**

Type: **not specified**

Update on WPMAG

Wednesday 14 January 2026 09:15 (30 minutes)

Presenter: CORATO, Valentina (ENEA)

Contribution ID: **84**

Type: **not specified**

Update on DCT

Wednesday 14 January 2026 09:45 (30 minutes)

Presenter: GIANNINI, Lorenzo

Contribution ID: 85

Type: **not specified**

Deliverable on 2025 CEA TF-WP4 and CS designs

Wednesday 14 January 2026 10:15 (25 minutes)

MAG-S.01.01-T024-D001/D002

Presenter: TORRE, Alexandre (CEA)

Contribution ID: **86**

Type: **not specified**

Deliverable on 2025 CEA Industrial study and conductor procurement

Wednesday 14 January 2026 10:40 (20 minutes)

MAG-S.01.01-T024-D003/D004

Presenter: TORRE, Alexandre (CEA)

Contribution ID: **87**

Type: **not specified**

3D Mechanical Modelling of the DEMO Low Aspect Ratio TF coil 2025

Wednesday 14 January 2026 11:30 (15 minutes)

MAG-S.01.01-T026-D001

Presenter: GARITTA, Silvia (CEA)

Contribution ID: **88**

Type: **not specified**

HTS SULTAN Design and manufacturing

Wednesday 14 January 2026 11:45 (20 minutes)

MAG-S.01.01-T027-D001/D002

Presenter: NGUYEN THANH DAO, Clément (CEA)

Contribution ID: 89

Type: **not specified**

WP4 SULTAN Design and manufacturing

Wednesday 14 January 2026 12:05 (20 minutes)

MAG-S.01.01-T028-D001/D002

Presenter: NGUYEN THANH DAO, Clément (CEA)

Contribution ID: 90

Type: **not specified**

Deliverable on 2025 CEA electromagnetic calculations –Magnetic field calculations on hybrid HTS/LTS and ITER-like CS designs, and update of TF WP#4 (new baseline).

Wednesday 14 January 2026 12:25 (15 minutes)

MAG-S.01.01-T029-D001

Presenter: TORRE, Alexandre (CEA)

Contribution ID: **91**

Type: **not specified**

Assessment of modelling needs and numerical tools for non-insulated or partially insulated HTS magnets

Wednesday 14 January 2026 13:40 (15 minutes)

MAG-S.01.01-T030-D001

Presenter: BRESCHI, Marco

Contribution ID: **92**

Type: **not specified**

Development of a synthetic database for CORC® cables

Wednesday 14 January 2026 13:55 (15 minutes)

MAG-S.01.01-T030-D002

Presenter: FRESCHI, Fabio

Contribution ID: 93

Type: **not specified**

CS coil preconceptual design and electromagnetic analysis for the 2024 DEMO baseline

Wednesday 14 January 2026 14:10 (20 minutes)

MAG-S.01.01-T031-D001/D003

Presenter: GREENWOOD, Jack (EPFL - EPF Lausanne)

Contribution ID: **94**

Type: **not specified**

PF coil preconceptual design and electromagnetic analysis for the 2024 DEMO baseline

Wednesday 14 January 2026 14:30 (20 minutes)

MAG-S.01.01-T031-D002/D004

Presenter: NES, Thomas (PSI - Paul Scherrer Institut)

Contribution ID: 95

Type: **not specified**

Continuation of the TF coil design with SMART insulating materials

Wednesday 14 January 2026 14:50 (15 minutes)

MAG-S.01.01-T031-D005

Presenter: Dr ORTINO, Mattia (PSI - Paul Scherrer Institut)

Contribution ID: **96**

Type: **not specified**

Report on the alternative design for VNS TF coils

Wednesday 14 January 2026 15:05 (15 minutes)

MAG-S.01.01-T032-D001

Presenter: ALDO, Di Zenobio (ENEA)

Contribution ID: 97

Type: **not specified**

Thermal-hydraulic analysis on VNS TF conductor

Wednesday 14 January 2026 15:20 (15 minutes)

MAG-S.01.01-T032-D002

Presenter: BONIFETTO, Roberto (05-PoliTo)

Contribution ID: **98**

Type: **not specified**

Analysis of new baseline and partial- or non-insulated coils

Wednesday 14 January 2026 16:05 (15 minutes)

MAG-S.01.03-T020-D003

Presenter: BONIFETTO, Roberto (05-PoliTo)

Contribution ID: 99

Type: **not specified**

Model and analysis of quench experiments in SULTAN.

Wednesday 14 January 2026 16:20 (15 minutes)

MAG-S.01.03-T020-D004

Presenter: ZAPPATORE, Andrea (05-PoliTo)

Contribution ID: **100**

Type: **not specified**

MC simulations of the neutron volumetric load on TF coils

Wednesday 14 January 2026 16:35 (15 minutes)

MAG-S.01.03-T030-D001

Presenter: LEDDA, Federico

Contribution ID: **101**

Type: **not specified**

Thermohydraulics analysis of the cooling system of TF coils

Wednesday 14 January 2026 16:50 (15 minutes)

MAG-S.01.03-T030-D002

Presenter: CASCIELLO, Martina (05-PoliTo)

Contribution ID: **102**

Type: **not specified**

Thermal –hydraulic analysis of the DEMO winding packs (2025)

Thursday 15 January 2026 09:00 (15 minutes)

MAG-S.01.03-T031-D001

Presenter: LEWANDOWSKA, Monika (03-WPUT)

Contribution ID: **103**

Type: **not specified**

Deliverable on 2025 CEA thermo-hydraulic analyses –Impact of hydraulic boundary conditions on CS operation

Thursday 15 January 2026 09:15 (15 minutes)

MAG-S.01.03-T027-D001

Presenter: LACROIX, Benoit (CEA)

Contribution ID: **104**

Type: **not specified**

Deliverable on Coordination of Thermal-Hydraulic Analysis

Thursday 15 January 2026 09:30 (15 minutes)

MAG-S.01.03-T028-D001

Presenter: NICOLLET, Sylvie (CEA)

Contribution ID: **105**

Type: **not specified**

Deliverable on 2025 CEA thermo-hydraulic analyses

Thursday 15 January 2026 09:45 (30 minutes)

MAG-S.01.03-T029-D001/D002/D003

Presenter: LE COZ, Quentin (CEA)

Contribution ID: **106**

Type: **not specified**

2025 Coordination of the mechanical analysis groups in WPMAG and Preliminary engineering design of the main structures of the magnet system

Thursday 15 January 2026 10:15 (25 minutes)

MAG-S.01.04-T002-D002/D003

Presenter: BOSO, Daniela ((01-RFX))

Contribution ID: **107**

Type: **not specified**

Preliminary clamp design and submodeling for TF Busbars

Thursday 15 January 2026 10:40 (15 minutes)

MAG-S.01.04-T020-D001

Presenter: GROTH, Corrado (04-UnivTorVergata)

Contribution ID: **108**

Type: **not specified**

Mechanical analysis of the 2024 CS coil designs (SPC variant)

Thursday 15 January 2026 11:25 (15 minutes)

MAG-S.01.04-T021-D001

Presenter: GREENWOOD, Jack (EPFL - EPF Lausanne)

Contribution ID: **109**

Type: **not specified**

Mechanical analysis of the 2024 PF coil designs (SPC variant)

Thursday 15 January 2026 11:40 (15 minutes)

MAG-S.01.04-T021-D002

Presenter: NES, Thomas (PSI - Paul Scherrer Institut)

Contribution ID: **110**

Type: **not specified**

MAG-S.01.04-T022-D001

Thursday 15 January 2026 11:55 (15 minutes)

Thermo-mechanical analyses and tests on laser welding process

Presenter: ORTWEIN, Rafal (07-IFJ PAN)

Contribution ID: **111**

Type: **not specified**

Advanced finite element modeling to support the experimental test

Thursday 15 January 2026 12:10 (15 minutes)

MAG-S.01.04-T023-D001

Presenter: FRANCESCO, Giorgetti (ENEA)

Contribution ID: **112**

Type: **not specified**

Lumped parameter circuit model for hysteresis losses in sector shaped HTS cables.

Thursday 15 January 2026 12:25 (15 minutes)

MAG-S.01.06-T012-D001

Presenter: SAVOLDI, Laura (05-PoliTo)

Contribution ID: **113**

Type: **not specified**

CS margin exploration with quasi isobaric loop and Cold end architecture to gain margin

Thursday 15 January 2026 12:40 (20 minutes)

MAG-S.02.01-T005-D001

MAG-S.02.01-T006-D001/D002

Presenter: BONNE, Francois (CEA)

Contribution ID: **114**

Type: **not specified**

2025 Theoretical studies on the quench detection system

Thursday 15 January 2026 14:00 (15 minutes)

MAG-S.02.02-T007-D001

Presenter: MAFFUCCI, Antonio

Contribution ID: 115

Type: **not specified**

Investigation of the voltage distribution across and within each TF coil during various electrical transients

Thursday 15 January 2026 14:15 (15 minutes)

Presenter: MESSINA, Giuseppe (ENEA)

Contribution ID: **116**

Type: **not specified**

Updates on EU-CN collaboration

Thursday 15 January 2026 14:30 (15 minutes)

Presenter: KAMENDJE, Richard

Contribution ID: **117**

Type: **not specified**

EU-CN: Deliverable on 2025 CEA CORC Conductor Performances Analyses

Thursday 15 January 2026 14:45 (15 minutes)

MAG-S.01.01-T025-D001

Presenter: TORRE, Alexandre (CEA)

Contribution ID: **118**

Type: **not specified**

EU-CN: Electromagnetic-Mechanical Modelling of CS ReBCO CORC-CICC 2025

Thursday 15 January 2026 15:00 (15 minutes)

MAG-S.01.04-T016-D002

Presenter: NIJHUIS, Arend (01-UT)

Contribution ID: **119**

Type: **not specified**

EU-CN: Model and analysis of HTS performance degradation after quench.

Thursday 15 January 2026 15:15 (15 minutes)

MAG-S.01.06-T009-D003

Presenter: ZAPPATORE, Andrea (Politecnico di Torino)

Contribution ID: **120**

Type: **not specified**

EU-CN:Coupling losses in HFRC and sector-shaped HTS cables.

MAG-S.01.06-T012-D002

Presenter: DE MARZI, Gianluca (ENEA)

Contribution ID: **121**

Type: **not specified**

EU-CN Analysis of AC losses and thermal –hydraulic simulations (2025)

Thursday 15 January 2026 15:30 (15 minutes)

MAG-S.01.06-T013-D001

Presenter: LEWANDOWSKA, Monika (03-WPUT)

Contribution ID: **122**

Type: **not specified**

EU-CN: REBCO tape mechanical loading tests and Ic

Thursday 15 January 2026 16:15 (15 minutes)

MAG-T.01.01-T030-D002

Presenter: NIJHUIS, Arend (01-UT)

Contribution ID: **123**

Type: **not specified**

EU-CN: Preliminary test in LN2_2025

Thursday 15 January 2026 16:30 (15 minutes)

MAG-T.01.01-T045-D002

Presenter: MASI, Andrea (ENEA)

Contribution ID: 124

Type: **not specified**

EU-CN: X-ray microtomography analysis of full-length HTS conductor prototype and electrical termination samples developed under the EU-China collaboration

Thursday 15 January 2026 16:45 (15 minutes)

MAG-T.01.01-T046-D001

Presenter: TISEANU, Ion (01-NILPRP)

Contribution ID: **125**

Type: **not specified**

EU-CN: Survey and tests on stainless steel

Thursday 15 January 2026 17:00 (15 minutes)

MAG-T.01.01-T050-D003

Presenter: WEISS, Klaus (KIT)

Contribution ID: **126**

Type: **not specified**

CORC-CICCs I_c and R_c under 77K cyclic loading in Twente Press

Friday 16 January 2026 13:30 (15 minutes)

MAG-T.01.01-T029-D002

Presenter: NIJHUIS, Arend (01-UT)

Contribution ID: **127**

Type: **not specified**

Deliverable on 2025 CEA magnetization test activities.

Friday 16 January 2026 09:00 (15 minutes)

MAG-T.01.01-T042-D001

Presenter: LE COZ, Quentin (CEA)

Contribution ID: **128**

Type: **not specified**

Purchase of a FIB-SEM equipped with EDS, EBSD and laser ablation chamber.

Friday 16 January 2026 09:15 (15 minutes)

MAG-T.01.01-T043-D001

Presenter: VANNOZZI, Angelo (ENEA)

Contribution ID: **129**

Type: **not specified**

AC losses and interfilament resistance measurements of unpatterned and commercially filamentized REBCO tapes

Friday 16 January 2026 09:30 (15 minutes)

MAG-T.01.01-T043-D002

Presenter: ANGRISANI ARMENIO, Achille (ENEA)

Contribution ID: **130**

Type: **not specified**

Measurements with the Magneto-Optical Imaging with an Indicator Film (MOIF) of REBCO tapes

Friday 16 January 2026 09:45 (15 minutes)

MAG-T.01.01-T043-D003

Presenter: LAVIANO, Francesco (05-PoliTo)

Contribution ID: **131**

Type: **not specified**

Design and materials procurement and Critical current measurements

Friday 16 January 2026 10:00 (15 minutes)

MAG-T.01.01-T044-D001/D002

Presenter: ANGRISANI ARMENIO, Achille (ENEA)

Contribution ID: **132**

Type: **not specified**

X-ray Tomography Analysis of Short-Length HTS DEMO Conductors with different architectures

Friday 16 January 2026 10:15 (15 minutes)

MAG-T.01.01-T047-D001

Presenter: TISEANU, Ion (01-NILPRP)

Contribution ID: **133**

Type: **not specified**

Cabling of various RW cable prototypes

Friday 16 January 2026 10:30 (15 minutes)

MAG-T.01.01-T048-D004

Presenter: SARASOLA, Xabier (EPFL)

Contribution ID: **134**

Type: **not specified**

SULTAN test of ENEA HTS sample SECAS 1

Friday 16 January 2026 11:15 (15 minutes)

MAG-T.01.01-T048-D006

Presenter: Dr ORTINO, Mattia (PSI - Paul Scherrer Institut)

Contribution ID: 135

Type: **not specified**

SULTAN test of Lasso 2 coil impregnated by water

Friday 16 January 2026 11:30 (15 minutes)

MAG-T.01.01-T048-D009

Presenter: BYKOVSKIY, Nikolay (EPFL)

Contribution ID: **136**

Type: **not specified**

Hydraulic tests

Friday 16 January 2026 11:45 (15 minutes)

MAG-T.01.01-T049-D001

Presenter: LEWANDOWSKA, Monika (03-WPUT)

Contribution ID: **137**

Type: **not specified**

Mechanical and electro-mechanical tests

Friday 16 January 2026 12:00 (15 minutes)

MAG-T.01.01-T050-D001

Presenter: BAGRETS, Nadezda (KIT)

Contribution ID: 138

Type: **not specified**

Manufacture of the C-profiles and production of approx. 3 times 100 m empty jacket for laser welding demonstration

Friday 16 January 2026 12:15 (15 minutes)

MAG-T.02.01-T004-D001/D002

Presenter: SARASOLA, Xabier (EPFL)

Contribution ID: **139**

Type: **not specified**

Manufacture of the EDIPO II subscale coil

Friday 16 January 2026 13:45 (15 minutes)

MAG-T.04.01-T003-D001

Presenter: GREENWOOD, Jack (EPFL - EPF Lausanne)

Contribution ID: **140**

Type: **not specified**

Double pancake Design, procurement and quench testing

Friday 16 January 2026 14:00 (25 minutes)

MAG-T.04.02-T002-D001/D002/D003

Presenter: BYKOVSKIY, Nikolay (EPFL)

Contribution ID: **141**

Type: **not specified**

HTS model coil activity at University of Seville

Friday 16 January 2026 14:25 (15 minutes)

Presenter: GARZIA MUNOZ, Manuel (Uni. Seville)

Contribution ID: 142

Type: **not specified**

Scalable HTS coils for TRUST experimental fusion device: Design and Manufacturing at Tuscia University

Friday 16 January 2026 14:40 (15 minutes)

Presenter: CALABRO, Giuseppe (17-UniTuscia)

Contribution ID: **143**

Type: **not specified**

Presentation on collaboration activities at UKAEA

Friday 16 January 2026 14:55 (15 minutes)

Presenter: LIAO, Min (UKAEA)

Contribution ID: 144

Type: **not specified**

Updates on Prospective R&D

Friday 16 January 2026 15:40 (15 minutes)

Presenter: BONGIOVÌ, Gaetano

Contribution ID: **145**

Type: **not specified**

Radiation tolerance of technical superconductors

Friday 16 January 2026 16:10 (15 minutes)

PRD-3.HTS.01-T021-D001

Presenter: EISTERER, Michael (OEAW)

Contribution ID: 146

Type: **not specified**

**Investigation of AC loss in filamentized coated
conductor tapes 4 mm and 12 mm wide, with the
filaments of 500 μm and 250 μm , prepared by
industrial process**

Friday 16 January 2026 16:25 (15 minutes)

PRD-3.HTS.01-T022-D001

Presenter: GOEMOERY, Fedor (CU)

Contribution ID: **147**

Type: **not specified**

Impact of neutron and secondary radiation on HTS determined by Monte Carlo and atomistic simulations

Friday 16 January 2026 16:40 (15 minutes)

PRD-3.HTS.01-T023-D001

Presenter: LEDDA, Federico

Contribution ID: **148**

Type: **not specified**

Feasibility study of the system for transport measurements during cryogenic gamma irradiation

Friday 16 January 2026 16:55 (15 minutes)

PRD-3.HTS.01-T023-D002

Presenter: PINTO, Valentina (ENEA)

Contribution ID: **149**

Type: **not specified**

Report om HTS neutron irradiation studies - 2025

Friday 16 January 2026 17:10 (15 minutes)

PRD-3.HTS.01-T024-D001

Presenter: DURAN, Ivan (IPP.CR)

Contribution ID: **150**

Type: **not specified**

Mechanical Analysis of Helias 5-B Magnet system

Friday 16 January 2026 15:55 (15 minutes)

Presenter: BIEK, Daniel Louis Arthur (EPFL)

Contribution ID: **151**

Type: **not specified**

Presentation on the irradiation activity at CIEMAT

Friday 16 January 2026 17:25 (15 minutes)

Presenter: PUIG, Teresa (CIEMAT)