

# ElFast - Workshop on the European XFEL Project



## Report of Contributions

Contribution ID: 13

Type: **not specified**

## Welcome and Introduction

*Tuesday, 9 May 2006 08:30 (10 minutes)*

**Presenter:** TRINES, Dieter (DESY)

**Session Classification:** Opening Plenary

Contribution ID: 14

Type: **not specified**

## The European XFEL Project

*Tuesday, 9 May 2006 08:40 (35 minutes)*

**Presenter:** ALTARELLI, Massimo (European XFEL Project Team)

**Session Classification:** Opening Plenary

Contribution ID: **15**

Type: **not specified**

**(no title)**

Contribution ID: **16**

Type: **not specified**

## **European XFEL - Overview technical layout**

*Tuesday, 9 May 2006 09:15 (35 minutes)*

**Presenter:** BRINKMANN, Reinhard (DESY)

**Session Classification:** Opening Plenary

Contribution ID: 17

Type: **not specified**

## DESY Purchasing

*Tuesday, 9 May 2006 09:50 (15 minutes)*

**Presenter:** SCHERF, Christian (DESY)

**Session Classification:** Opening Plenary

Contribution ID: **18**

Type: **not specified**

## Introduction Working Groups

*Tuesday, 9 May 2006 10:20 (10 minutes)*

**Presenter:** TRINES, Dieter (DESY)

**Session Classification:** Opening Plenary

Contribution ID: **19**

Type: **not specified**

## Warm Vacuum Systems

*Tuesday, 9 May 2006 16:50 (50 minutes)*

**Presenter:** SEIDEL, Mike (DESY)

**Session Classification:** WG 6 Vacuum cold & warm



Contribution ID: **20**

Type: **not specified**

**(no title)**

Contribution ID: **21**

Type: **not specified**

## Cold Vacuum Issues

*Tuesday, 9 May 2006 16:00 (50 minutes)*

**Presenter:** ZAPFE, Kirsten (DESY)

**Session Classification:** WG 6 Vacuum cold & warm

Contribution ID: 22

Type: **not specified**

## XFEL Beam Dumps

*Tuesday, 9 May 2006 17:40 (20 minutes)*

**Presenter:** SCHMITZ, Michael (DESY)

**Session Classification:** WG 6 Vacuum cold & warm

Contribution ID: 23

Type: **not specified**

## Underground Facilities

*Tuesday, 9 May 2006 11:00 (30 minutes)*

Project description, Dates, Contract Lots, Award Procedures

**Presenter:** HAENISCH, Lindemar (DESY)

**Session Classification:** WG 1 Civil Engineering, Building Services & Utilities

Contribution ID: 24

Type: **not specified**

## Surface Buildings

*Tuesday, 9 May 2006 11:30 (30 minutes)*

Project Description, Dates, Technical Infrastructure, Office Utilities, Contract  
Lots, Award Procedures

**Presenter:** DOST, Per (DESY)

**Session Classification:** WG 1 Civil Engineering, Building Services & Utilities

Contribution ID: 25

Type: **not specified**

## Power Distribution and Mains

*Tuesday, 9 May 2006 12:00 (30 minutes)*

Utilities Overview, Power Distribution, Cabling, MV Switchgear, Emergency Power

**Primary author:** HAVLICEK, Jan (DESY)

**Presenter:** JENSEN, Jens-Peter (DESY)

**Session Classification:** WG 1 Civil Engineering, Building Services & Utilities

Contribution ID: 26

Type: **not specified**

## Heating, Air Conditioning and Ventilation

*Tuesday, 9 May 2006 13:30 (25 minutes)*

Heating Systems, Ventilation, Air Conditioning, Fire Ventilation

**Primary author:** CELIK, Sabahattin (DESY)

**Presenter:** JENSEN, Jens-Peter (DESY)

**Session Classification:** WG 1 Civil Engineering, Building Services & Utilities

Contribution ID: 27

Type: **not specified**

## Water Cooling

*Tuesday, 9 May 2006 13:55 (25 minutes)*

Water Cooling Systems, Dry-wet Cooling Tower, Water Chiller, LCW-  
Water Treatment

**Presenter:** ULLRICH, Frank-Reinhard (DESY)

**Session Classification:** WG 1 Civil Engineering, Building Services & Utilities



Contribution ID: **28**

Type: **not specified**

## Specials: Transport Systems

*Tuesday, 9 May 2006 14:20 (25 minutes)*

Special Transports, Transport Vehicles & Tooling

**Presenter:** MEYNERS, Norbert (DESY)

**Session Classification:** WG 1 Civil Engineering, Building Services & Utilities

Contribution ID: 29

Type: **not specified**

## Special Safety Systems for XFEL

*Tuesday, 9 May 2006 14:45 (25 minutes)*

Safety Systems for the Underground and Surface Facilities

**Presenter:** SCHRADER, Stefan (DESY)

**Session Classification:** WG 1 Civil Engineering, Building Services & Utilities

Contribution ID: **30**

Type: **not specified**

## **Cold Magnets and Current Leads**

*Tuesday, 9 May 2006 16:00 (40 minutes)*

**Presenter:** BRUECK, Heinrich-Dieter (DESY)

**Session Classification:** WG 4 Magnets & Powersupplies

Contribution ID: **31**

Type: **not specified**

## Warm Magnets

*Tuesday, 9 May 2006 16:40 (40 minutes)*

**Presenter:** KRAUSE, Bernward (DESY)

**Session Classification:** WG 4 Magnets & Powersupplies

Contribution ID: **32**

Type: **not specified**

## **Power Supplies for XFEL**

*Tuesday, 9 May 2006 17:20 (40 minutes)*

**Presenter:** ECKOLDT, Hans-Joerg (DESY)

**Session Classification:** WG 4 Magnets & Powersupplies

Contribution ID: 33

Type: **not specified**

## Overview RF System

*Tuesday, 9 May 2006 16:00 (20 minutes)*

**Presenter:** CHOROBA, Stefan (DESY)

**Session Classification:** WG 2 RF System

Contribution ID: **34**

Type: **not specified**

## **The XFEL Modulator**

*Tuesday, 9 May 2006 16:20 (15 minutes)*

**Presenter:** KÖHLER, Winfried (DESY)

**Session Classification:** WG 2 RF System

Contribution ID: 35

Type: **not specified**

## Waveguide distribution for XFEL

*Tuesday, 9 May 2006 16:35 (15 minutes)*

**Presenter:** KATALEV, Valery

**Session Classification:** WG 2 RF System



Contribution ID: 36

Type: **not specified**

## **Klystron Interlock for the XFEL RF Stations**

*Tuesday, 9 May 2006 16:50 (15 minutes)*

**Presenter:** LEICH, Holger (DESY)

**Session Classification:** WG 2 RF System

Contribution ID: **38**

Type: **not specified**

## **Driver Amplifier for 10 MW Klystrons**

*Tuesday, 9 May 2006 17:05 (10 minutes)*

**Presenter:** RANDHAHN, Jean (DESY)

**Session Classification:** WG 2 RF System

Contribution ID: 39

Type: **not specified**

## **RF-Gun for FLASH & XFEL**

*Tuesday, 9 May 2006 17:15 (10 minutes)*

**Presenter:** FLÖTTMANN, Klaus (DESY)

**Session Classification:** WG 2 RF System

Contribution ID: **40**

Type: **not specified**

## SC Cavities: Nb Material

spec., eddy current, QA

**Presenter:** SINGER, Waldemar (DESY)

Contribution ID: 41

Type: **not specified**

## **Actual cavity preparation sequences (under study for the XFEL)**

*Tuesday, 9 May 2006 11:30 (20 minutes)*

tuning, chemistry, HPW

**Presenter:** MATHEISEN, Axel (DESY)

**Session Classification:** WG 7 Cavities & Couplers

Contribution ID: 42

Type: **not specified**

## Vertical test measurement

*Tuesday, 9 May 2006 11:50 (15 minutes)*

**Presenter:** RESCHKE, Detlef (DESY)

**Session Classification:** WG 7 Cavities & Couplers

Contribution ID: 43

Type: **not specified**

## X-FEL Power Coupler Design

*Tuesday, 9 May 2006 16:00 (15 minutes)*

spec.

**Presenter:** MÖLLER, Wolf-Dietrich (DESY)

**Session Classification:** WG 7 Cavities & Couplers

Contribution ID: 44

Type: **not specified**

## **XFEL Power Couplers - Industrialization process and manufacturing**

*Tuesday, 9 May 2006 16:15 (25 minutes)*

definition contract

**Presenter:** PRAT, Serge (IN2P3)

**Session Classification:** WG 7 Cavities & Couplers



Contribution ID: 45

Type: **not specified**

## Power Coupler: Testing

*Tuesday, 9 May 2006 16:40 (15 minutes)*

high power test

**Presenter:** KOSTIN, Denis (DESY)

**Session Classification:** WG 7 Cavities & Couplers

Contribution ID: 46

Type: **not specified**

## X-FEL Power Coupler Assembly

*Tuesday, 9 May 2006 16:55 (25 minutes)*

string assembly of coupler

**Presenter:** MÖLLER, Wolf-Dietrich (DESY)

**Session Classification:** WG 7 Cavities & Couplers

Contribution ID: 47

Type: **not specified**

## High Frequency Beam Line Absorber

*Tuesday, 9 May 2006 17:35 (10 minutes)*

**Presenter:** MILDNER, Nils (DESY)

**Session Classification:** WG 7 Cavities & Couplers

Contribution ID: 48

Type: **not specified**

## Frequency tuner: mechanical design

design, spec.

**Presenter:** LILJE, Lutz (DESY)

Contribution ID: 49

Type: **not specified**

## Frequency tuner: motor, gear-box

design, spec.

**Presenter:** LILJE, Lutz (DESY)

Contribution ID: 50

Type: **not specified**

## Frequency Tuner for the XFEL

*Tuesday, 9 May 2006 17:50 (15 minutes)*

design, spec.

**Presenter:** LILJE, Lutz (DESY)

**Session Classification:** WG 7 Cavities & Couplers

Contribution ID: 51

Type: **not specified**

## Electron Beam Diagnostics for XFEL

*Tuesday, 9 May 2006 11:00 (30 minutes)*

**Presenter:** NÖLLE, Dirk (DESY)

**Session Classification:** WG 5 Diagnostics, Controls & Laser

Contribution ID: 52

Type: **not specified**

## Discussion

*Tuesday, 9 May 2006 11:30 (10 minutes)*

**Session Classification:** WG 5 Diagnostics, Controls & Laser



Contribution ID: 53

Type: **not specified**

## Photon Diagnostics

Contribution ID: 54

Type: **not specified**

## Discussion

*Tuesday, 9 May 2006 12:00 (10 minutes)*

**Session Classification:** WG 5 Diagnostics, Controls & Laser

Contribution ID: 55

Type: **not specified**

## Special Diagnostics

**Presenter:** SCHLARB, Holger (DESY)

Contribution ID: 56

Type: **not specified**

## Discussion

Contribution ID: 57

Type: **not specified**

## The XFEL Control System: Hardware

*Tuesday, 9 May 2006 13:30 (20 minutes)*

Rack, Crates, Electronics; Network, Computers, Timing, MPS

**Presenter:** REHLICH, Kay (DESY)

**Session Classification:** WG 5 Diagnostics, Controls & Laser

Contribution ID: **58**

Type: **not specified**

## Discussion

*Tuesday, 9 May 2006 13:50 (10 minutes)*

**Session Classification:** WG 5 Diagnostics, Controls & Laser

Contribution ID: 59

Type: **not specified**

## The XFEL Control System: Software

*Tuesday, 9 May 2006 14:00 (20 minutes)*

**Presenter:** REHLICH, Kay (DESY)

**Session Classification:** WG 5 Diagnostics, Controls & Laser

Contribution ID: **60**

Type: **not specified**

## **Industrial Participation in LLRF Control for the European XFEL**

*Tuesday, 9 May 2006 14:30 (20 minutes)*

**Presenter:** SIMROCK, Stefan (DESY)

**Session Classification:** WG 5 Diagnostics, Controls & Laser



Contribution ID: **61**

Type: **not specified**

## Discussion

*Tuesday, 9 May 2006 14:50 (10 minutes)*

**Session Classification:** WG 5 Diagnostics, Controls & Laser

Contribution ID: **62**

Type: **not specified**

## Laser

**Presenter:** DUESTERER, Stefan (DESY)

Contribution ID: **63**

Type: **not specified**

## Discussion

Contribution ID: **64**

Type: **not specified**

## Discussion

*Tuesday, 9 May 2006 14:20 (10 minutes)*

**Session Classification:** WG 5 Diagnostics, Controls & Laser

Contribution ID: 65

Type: **not specified**

## XFEL-Cryogenics - an overview

*Tuesday, 9 May 2006 11:00 (10 minutes)*

Options, spec

**Presenter:** PETERSEN, Bernd (DESY)

**Session Classification:** WG 3 Cryogenics & Cryostats

Contribution ID: **66**

Type: **not specified**

## XFEL-cryoplant

Options, spec

**Presenter:** PETERSEN, Bernd (DESY)

Contribution ID: **67**

Type: **not specified**

## Valve boxes

Options, spec

**Presenter:** PETERSEN, Bernd (DESY)

Contribution ID: **68**

Type: **not specified**

## **Bunch-Compressor-Transferlines**

*Tuesday, 9 May 2006 11:20 (10 minutes)*

spec

**Presenter:** SELLMANN, Detlef (DESY)

**Session Classification:** WG 3 Cryogenics & Cryostats



Contribution ID: **69**

Type: **not specified**

## String-Connection-Boxes

*Tuesday, 9 May 2006 11:30 (5 minutes)*

spec

**Presenter:** SELLMANN, Detlef (DESY)

**Session Classification:** WG 3 Cryogenics & Cryostats

Contribution ID: 70

Type: **not specified**

## Transfer-Lines

spec

**Presenter:** SELLMANN, Detlef (DESY)

Contribution ID: 71

Type: **not specified**

## Shopping-list XFEL-cryogenics

**Presenter:** PETERSEN, Bernd (DESY)

Contribution ID: 72

Type: **not specified**

## Discussion cryogenics

*Tuesday, 9 May 2006 11:35 (20 minutes)*

**Session Classification:** WG 3 Cryogenics & Cryostats

Contribution ID: 73

Type: **not specified**

## XFEL-Accelerator Module Test Facility AMTF

*Tuesday, 9 May 2006 12:05 (10 minutes)*

Options, spec

**Presenter:** PETERSEN, Bernd (DESY)

**Session Classification:** WG 3 Cryogenics & Cryostats

Contribution ID: 74

Type: **not specified**

## Test dewars

Contribution ID: 75

Type: **not specified**

## Valve boxes

Contribution ID: 76

Type: **not specified**

## Transfer lines



Contribution ID: 77

Type: **not specified**

## He-pumps

Contribution ID: 78

Type: **not specified**

## Miscellaneous

Contribution ID: 79

Type: **not specified**

## AMTF shopping list

Contribution ID: **80**

Type: **not specified**

## **AMTF discussion**

*Tuesday, 9 May 2006 13:30 (30 minutes)*

**Session Classification:** WG 3 Cryogenics & Cryostats

Contribution ID: **81**

Type: **not specified**

## **Cryo Module TypeIII Assembly outside Clean Room**

*Tuesday, 9 May 2006 14:20 (15 minutes)*

Industrlal study, procedure

**Presenter:** JENSCH, Kay (DESY)

**Session Classification:** WG 3 Cryogenics & Cryostats

Contribution ID: **82**

Type: **not specified**

## Clean room

Prototyping, interfaces

**Presenter:** MATHEISEN, Axel (DESY)

Contribution ID: **83**

Type: **not specified**

## Outside clean room

**Presenter:** JENSCH, Kay (DESY)

Contribution ID: **84**

Type: **not specified**

## Module discussion

*Tuesday, 9 May 2006 14:35 (30 minutes)*

**Session Classification:** WG 3 Cryogenics & Cryostats



Contribution ID: 85

Type: **not specified**

## SC Cavities; Material, Fabrication

*Tuesday, 9 May 2006 11:00 (30 minutes)*

spec, EDMS, QA

**Presenter:** SINGER, Waldemar (DESY)

**Session Classification:** WG 7 Cavities & Couplers

Contribution ID: **86**

Type: **not specified**

## Discussion

*Tuesday, 9 May 2006 12:05 (25 minutes)*

**Session Classification:** WG 7 Cavities & Couplers

Contribution ID: **87**

Type: **not specified**

## Discussion

*Tuesday, 9 May 2006 17:20 (15 minutes)*

**Session Classification:** WG 7 Cavities & Couplers

Contribution ID: **88**

Type: **not specified**

## Discussion

*Tuesday, 9 May 2006 17:45 (5 minutes)*

**Session Classification:** WG 7 Cavities & Couplers

Contribution ID: **89**

Type: **not specified**

## Discussion

*Tuesday, 9 May 2006 18:05 (25 minutes)*

**Session Classification:** WG 7 Cavities & Couplers

Contribution ID: **90**

Type: **not specified**

## Discussion

*Tuesday, 9 May 2006 17:25 (1h 5m)*

**Session Classification:** WG 2 RF System

Contribution ID: **91**

Type: **not specified**

# **Magnet Technology for the XFEL Undulator Systems**

*Tuesday, 9 May 2006 18:00 (20 minutes)*

**Presenter:** PFLÜGER, Joachim (DESY)

**Session Classification:** WG 4 Magnets & Powersupplies

Contribution ID: **92**

Type: **not specified**

## Permanent Magnets



Contribution ID: **93**

Type: **not specified**

## Discussion

*Tuesday, 9 May 2006 18:20 (10 minutes)*

**Session Classification:** WG 4 Magnets & Powersupplies

Contribution ID: 94

Type: **not specified**

## Lasers for Pump-Probe Experiments

*Tuesday, 9 May 2006 11:40 (20 minutes)*

**Presenter:** DÜSTERER, Stefan (DESY)

**Session Classification:** WG 5 Diagnostics, Controls & Laser

Contribution ID: 95

Type: **not specified**

## Procurement for the XFEL Project

*Tuesday, 9 May 2006 10:05 (15 minutes)*

**Presenter:** WITTE, Karl (European XFEL Project Team)

**Session Classification:** Opening Plenary

Contribution ID: **96**

Type: **not specified**

## Cryomodules

*Tuesday, 9 May 2006 14:10 (10 minutes)*

**Presenter:** LANGE, Rolf (DESY)

**Session Classification:** WG 3 Cryogenics & Cryostats

Contribution ID: 97

Type: **not specified**

## Summary WG 1

*Wednesday, 10 May 2006 10:00 (10 minutes)*

**Presenter:** EBBINGHAUS, Kurt (Babcock Noell Nuclear)

**Session Classification:** Resumee of workshop by industry co-conveners and discussion

Contribution ID: **98**

Type: **not specified**

## Summary WG 2

*Wednesday, 10 May 2006 10:10 (10 minutes)*

**Presenter:** KÄSLER, Wolfgang (Puls-Plasmatechnik)

**Session Classification:** Resumee of workshop by industry co-conveners and discussion

Contribution ID: **99**

Type: **not specified**

## Summary WG 3

*Wednesday, 10 May 2006 10:20 (10 minutes)*

**Presenter:** PEINIGER, Michael (ACCEL)

**Session Classification:** Resumee of workshop by industry co-conveners and discussion

Contribution ID: **100**

Type: **not specified**

## Summary WG 4

*Wednesday, 10 May 2006 10:30 (10 minutes)*

**Presenter:** ROMERO RUIZ, Javier (CDTI)

**Session Classification:** Resumee of workshop by industry co-conveners and discussion



Contribution ID: **101**

Type: **not specified**

## Summary WG 5

*Wednesday, 10 May 2006 10:40 (10 minutes)*

**Presenter:** WILCOX, David (E2V Technologies)

**Session Classification:** Resumee of workshop by industry co-conveners and discussion

Contribution ID: **102**

Type: **not specified**

## Summary WG 6

*Wednesday, 10 May 2006 10:50 (10 minutes)*

**Presenter:** VAN OTTERLOO, Pieter (Dutch Scientific)

**Session Classification:** Resumee of workshop by industry co-conveners and discussion

Contribution ID: **103**

Type: **not specified**

## Summary WG 7

*Wednesday, 10 May 2006 11:00 (10 minutes)*

**Presenter:** CORNIANI, Giorgio (Ettore Zanon)

**Session Classification:** Resumee of workshop by industry co-conveners and discussion

Contribution ID: **104**

Type: **not specified**

## Discussion

*Wednesday, 10 May 2006 11:10 (1h 10m)*

**Session Classification:** Resumee of workshop by industry co-conveners and discussion

Contribution ID: **105**

Type: **not specified**

## XFEL-Linac Cryogenics

*Tuesday, 9 May 2006 11:10 (10 minutes)*

**Presenter:** PETERSEN, Bernd (DESY)

**Session Classification:** WG 3 Cryogenics & Cryostats