



HL-LHC WP3: IR magnets

E. Todesco

D. Duarte Ramos (Deputy)



May 2021

Nb₃Sn magnets

Triplet Q1/Q3

G. Ambrosio, S. Feher (FNAL)
S. Izquierdo Bermudez
(CERN WPE)

Triplet Q2

S. Izquierdo Bermudez
(CERN WPE)

Nb-Ti correctors

Orbit correctors

F. Toral (CIEMAT)
J. Carlos Perez (CERN WPE)

High order correctors

M. Statera (INFN LASA)
A. Musso (CERN WPE)

D2 correctors

Q. Xu (IHEP)
G. Kirby, A. Musso (CERN WPE)

Nb-Ti and resistive main magnets

Separation dipole D1

T. Nakamoto (KEK)
A. Musso (CERN WPE)

Recombination dipole D2

S. Farinon (INFN Genova)
A. Foussat (CERN WPE)

MQYY

D. Simon (CEA)
A. Foussat (CERN WPE)

MBW and MQW

P. Schwarz (CERN WPE)

Q4, Q10 in IR1 and IR5

H. Prin (CERN WPE)



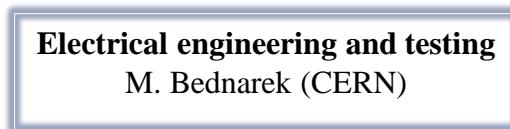
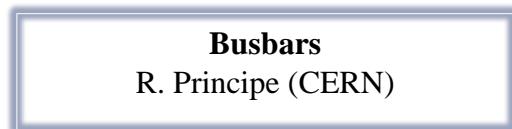
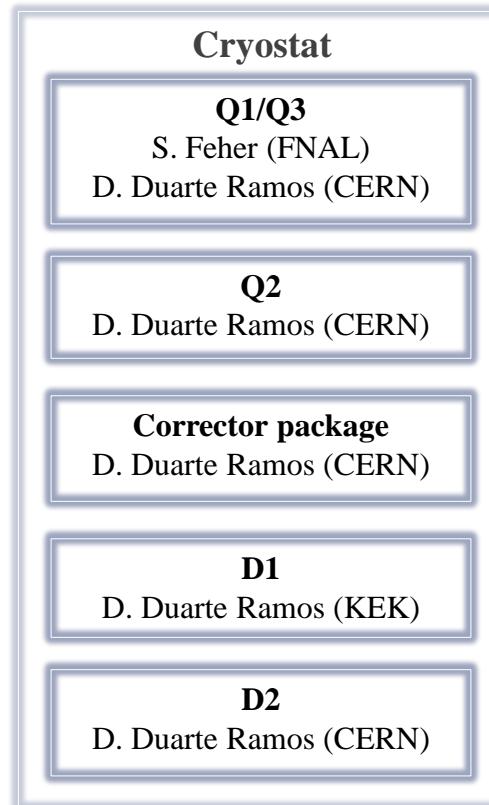
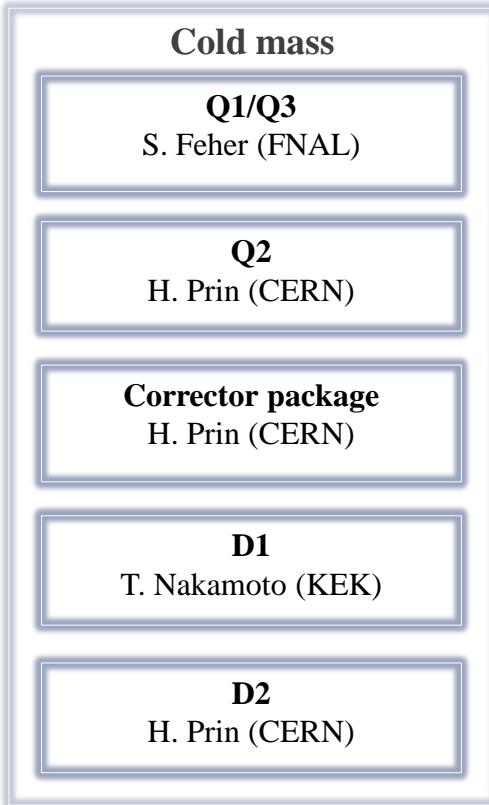


HL-LHC WP3: IR magnets

Detail of cold mass and cryostat



May 2021





HL-LHC WP3: IR magnets

Detail of busbars



May 2021

Busbars

R. Principe

Cable procurement

J. Fleiter (CERN)

Integration

H. Prin (CERN)

Detection

R. Denz (CERN)

Protection

A. Verweij (CERN)



HL LHC WP3: Q1/Q3

G. Ambrosio, S. Feher



February 2020

Magnet fabrication

G. Ambrosio (FNAL)

M. Baldini (FNAL, deputy)

Conductor

L. Cooley (FSU)

Strand

L. Cooley (FSU)

V. Lombardo (FNAL, deputy)

Cable

I. Pong (LBNL)

C. Sanabria (LBNL, deputy)

Coil parts procurement

M. Yu (FNAL)

A. Nobrega (FNAL, deputy)

Coil fabrication at FNAL

A. Nobrega (FNAL)

M. Yu (FNAL, deputy)

Coil fabrication at BNL

J. Schmalzle (BNL)

M. Anarella (BNL, deputy)

Magnet assembly

S. Prestemon (LBNL)

D. Cheng (LBNL, deputy)

Cryomagnet assembly and test

S. Feher (FNAL)

T. Strauss (FNAL, deputy)

Cold mass assembly

S. Feher (FNAL)

A. Vouris (FNAL, deputy)

Cryostat assembly

S. Feher (FNAL)

A. Vouris (FNAL, deputy)

Vertical test at BNL

J. Muratore (BNL)

P. Joshi (BNL, deputy)

Horizontal test at FNAL

G. Chlachidze (FNAL)

S. Stoynev (FNAL, deputy)



HL LHC WP3: Q2

S. Izquierdo Bermudez



January 2020

Conductor

B. Bordini

Strand

B. Bordini

Cable

J. Fleiter

Short model

Coil fabrication

J. C. Perez

Magnet assembly

J. C. Perez

Electrical test

J. C. Perez

QA

A. Musso

Prototype and series

Coil fabrication

S. Izquierdo Bermudez

Magnet assembly

S. Izquierdo Bermudez

Cold mass assembly

H. Prin

Busbars

R. Principe

Electrical test

A. Foussat

QA

R. Principe

Cryostat

D. Duarte Ramos

Magnetic measurement

L. Fiscarelli

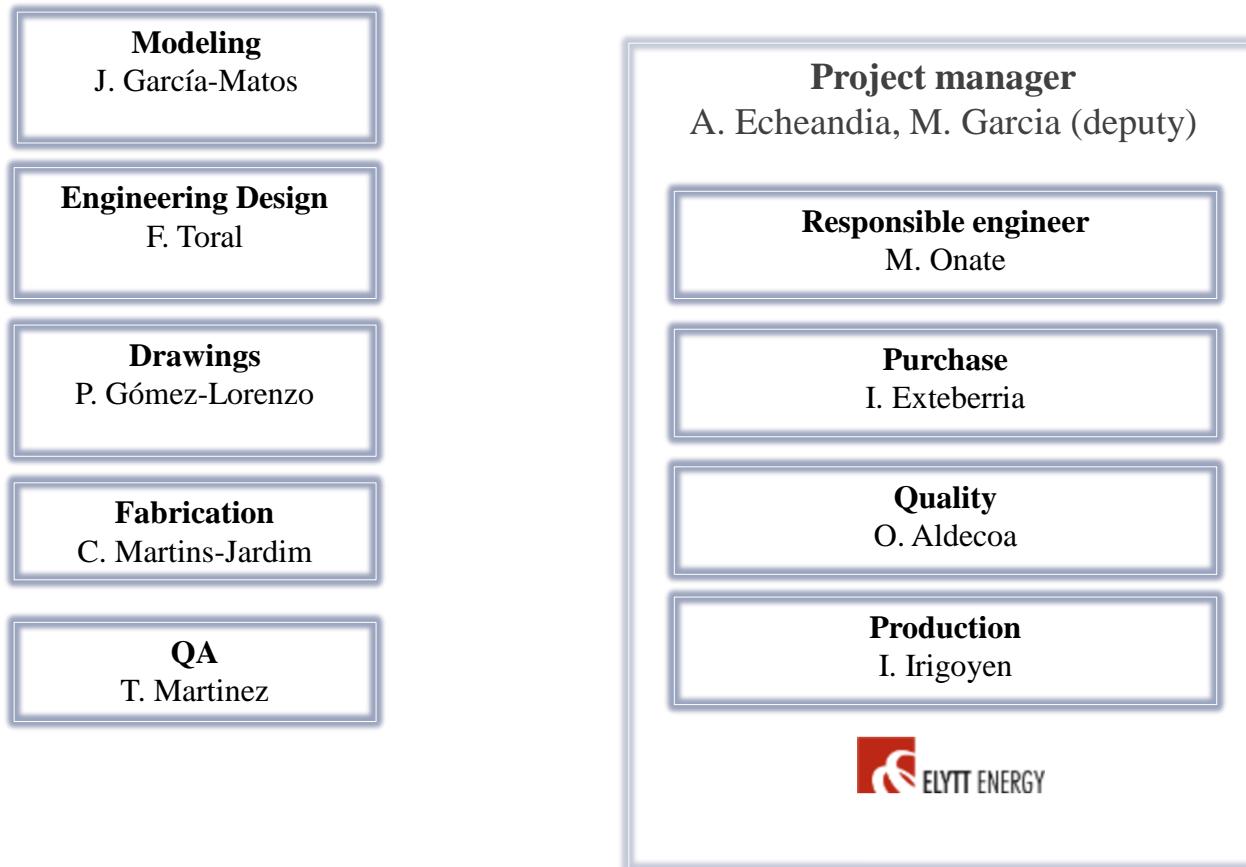
Power test

F. Mangiarotti

HL LHC WP3: MCBXF

F. Toral
Deputy: J. García-Matos

May 2021



HL LHC WP3: HIGH ORDER CORRECTORS

M. Statera, M. Prioli (deputy)

July 2019

Design

M. Statera, M. Todero (deputy)

Contract follow-up

M. Sorbi

Room temperature test

D. Pedrini

Power test at 4 K

M. Prioli

Magnetic field measurements

S. Mariotto

QA

M. Prioli

Magnet production

F. Gangini, C. Santini (deputy)

Manufacturing

C. Santini, M. Campaniello (deputy)

Contract section

P. Manini

QA

L. Corradini, A. Muca (deputy)





HL LHC WP3: D1

T. Nakamoto



May 2021

Design and fabrication

M. Sugano

Engineering

H. Kawamata, N. Okada

Cold mass assembly

N. Kimura

Test

K. Suzuki

Electrical test and QA

Y. Ikemoto



HL LHC WP3: D2

S. Farinon,
B. Caiffi (deputy)

May 2021

Magnetic and mechanical design
A. Pampaloni

Protection
B. Caiffi

Contract follow-up
B. Caiffi

Instrumentation and test at CERN
A. Bersani

Engineering design and drawings
R. Cereseto

QA
B. Caiffi

Project manager
S. Meneghetti

Engineering design
N. Valle

Manufacturing drawings
R. Morasso, L. Vercalli

Construction
S. Angius

Test and controls
A. Barutti

Tooling
S. Angius

QA
F. Terzi



IHEP

HL LHC WP3: MCBRD

Q. Xu

W. Wu (deputy)



May 2021

Design & Analysis
R. Kang, Y. Liang (deputy)

Contract follow-up
J. Wang, D. Ni (deputy)

QA/QC
C. Li, J. Wang(deputy)



Production

H. Tang

Project Manager

B. Feng

Chief Scientist

J. Chen

Mechanical Engineer

H. Fan

Test Engineer

H. Wu

Product Engineer

J. Wu

QA/QC

F. Chen



苏州八匹马超导科技有限公司

Test

W. Wu

RT Field Measurement
L. Li, Q. Peng (deputy)

4.1 K test
W. Yang, D. Ni (deputy)

QA/QC
Y. Liang, W. Yang (deputy)



HL LHC WP3: MQYYM

D. Simon

May 2021

Design

Magnetic and mechanical design

M. Segreti

Quench protection

D. Simon

Short model

Engineering design tooling and components

P. Graffin

Coil fabrication

M. Segreti, D. Simon

Magnet assembly

D. Simon

Instrumentation

D. Simon

Procurement

H. Neyrial

QA

F. Rondeaux

Test

Cryogenics

J. M. Gheller

Test station

D. Bouziat

Magnetic measurements

D. Simon