

REFERENCES

- [1] LHC Design Report, CERN-2004-003, 4 June 2004.
- [2] *Large Hadron Collider – A Marvel of Technology*, Lyn Evans ed., .
- [3] L. Rossi, “LHC and the Role of Superconductivity in one of the Largest Scientific Enterprise”. *IEEE Trans. Appl. Sup.*
- [4] L. Rossi, Eucas2009.
- [5] M. Lamont, “LHC from Commissioning to Operation”, Proc. of IPAC11.
- [6] S. Fartoukh, O. Bruning, CERN LHC Project Report 501, 2011.
- [7] C. Vollinger, E. Todesco, “Identification of assembly faults through the detection of magnetic field anomalies in the production of the LHC dipoles”, *IEEE Trans. Appl. Supercond.* **16** (2006) 204-7
- [8] S. Sanfilippo, et al., ‘Magnetic performance of the main superconducting magnets for the LHC’ presented at MT20, *IEEE Trans. Appl. Supercond.* **18** (2008)
- [9] N. Sammuth and L. Bottura, “Mathematical formulation to predict the harmonics of the superconducting Large Hadron Collider magnets, Physical Review Special Topics - Accelerators and Beams 9, 012402 (2006)
- [10] G. de Rijk et al, “The EuCARD High Field Magnet Project”, submitted to *IEEE Trans. Appl. Supercond.* for publication
- [11] M. Karppinen et al, “ Design of 11 Twin Aperture Nb3Sn Dipole demonstrator for LHC Upgrades”, submitted to *IEEE Trans. Appl. Supercond.* for publication
- [12] S. Caspi et al., Design of a 120 mm Bore 15 T Quadrupole for the LHC Upgrade Phase II, *IEEE Trans. Appl. Supercond.* **20** (2010)
- [13] R. Assmann et al., “First Thoughts on a Higher-Energy LHC”, CERN-ATS-2010-177 (2010).
- [14] A. Devred et al., “High field accelerator magnet R&D in Europe” *IEEE Trans. Appl. Supercond.* **14** (2004), p339-344
- [15] LARP proposal, May 2003. Available: <http://www.uslarp.org/>
- [16] G. Ambrosio et al., “Test Results of the First 3.7 m Long Nb3Sn Quadrupole by LARP and Future Plans”, *IEEE Trans. Appl. Supercond.* **21** (2011) p.1858-1862
- [17] Ballarino A, “Alternative design concepts for multi-circuit HTS link systems”, *IEEE Trans. on Applied Supercond.* 2011; 21, p. 980-984.
- [18] F. Borgnolutti et al., “ Construction of the CERN Fast Cycled Magnet Prototype” submitted to *IEEE Trans. Appl. Supercond.* for publication
- [19] P. Fabbriatore et al., “The Construction of the Model of the Curved Fast Ramped Superconducting Dipole for FAIR SIS300 Synchrotron”, *IEEE Trans. Appl. Supercond.*, 21, Issue 3, 2011, pp 1863-1867
- [20] T. Boutboul et al., “Heat Treatment Optimization Studies on PIT Strand for the NED Project”, *IEEE Trans. Appl. Supercond.* **19** (2009) p.2564-2567
- [21] V.V. Kashikhin, A.V. Zlobin, “Magnetic instabilities in Nb3Sn strands and cables”, *IEEE Trans. Appl. Supercond.*, vol. 15, no. 2, pp. 1621–1624, Jun. 2005
- [22] B. Bordini B, L. Rossi, “Self field instability in high Jc Nb3Sn strands with high copper residual resistivity ratio,” *IEEE Trans. Appl. Supercond.* vol. 19 no. 3, pp. 2470-2476, June 2009
- [23] B. Bordini et al., “Impact of the Residual Resistivity Ratio on the Stability of Nb3Sn Magnets”, submitted to *IEEE Trans. Appl. Supercond.* for publication
- [24] M. Bajko et al., “The SMC (Short Model Coil) dipole: an R&D program towards Nb3Sn accelerator magnets”, submitted to *IEEE Trans. Appl. Supercond.* for publication
- [25] A. Zlobin et al., “Nb3Sn Accelerator Magnet Technology R&D at Fermilab”, Proceeding of PAC07, p. 482,484
- [26] S. Fartoukh, “An Achromatic Telescoping Squeezing (ATS) Scheme for the LHC Upgrade”, Proceedings of IPAC11 Int. Conf. on Particle Accelerators 2011, <http://accelconf.web.cern.ch/AccelConf/>
- [27] G. Ambrosio et al., “Progress in the Long Nb3Sn Quadrupole R&D by LARP”, submitted to *IEEE Trans. Appl. Supercond.* for publication
- [28] M. Martchevskiy et al., “Test results of HQ01, a 120 mm Bore LARP Quadrupole Magnet for the LHC Luminosity”, submitted to *IEEE Trans. Appl. Supercond.* for publication
- [29] E. W. Collings et al., «Measurements Of Ac Loss In Cored Nb3sn Rutherford Cables: Interstrand Contact Resistance As Function Of Core Width”, *Transactions of the International Cryogenic Materials Conference - ICMC*, Vol. 54; p. 285-292
- [30] G. Kirby et al., submitted to *IEEE Trans. Appl. Supercond.* for publication
- [31] Q. Xu et al., “Conceptual Design of a Large-aperture Dipole Magnet for HL-LHC Upgrade”, submitted to *IEEE Trans. Appl. Supercond.* for publication
- [32] F. Ruggiero editor: O. Bruning, et al., “LHC Luminosity and Energy Upgrade: A Feasibility Study”, LHC Project Report 626, CERN, Geneva, December 2002.
- [33] P. McIntyre, A. Sattarov, “On the feasibility of a tripler upgrade for the LHC”, PAC (2005) p.634.
- [34] R. Assmann et al., “First Thoughts on a Higher-Energy LHC” CERN Report n. CERN-ATS-2010-177, August 2010.
- [35] Proceedings of the workshop on “The High-Energy Large Hadron Collider”, E. Todesco and F. Zimmermann editors, Malta October 2010, CERN- 2011-03, 8 April 2011.
- [36] E. Todesco, “High Field Limits in Superconducting Magnets for Particle Accelerators”, submitted to *IEEE Trans. Appl. Supercond.* for publication.
- [37] P. Ferracin et al., “Recent Test Results of the High Field Nb3Sn Dipole Magnet HD2”, *IEEE Trans. Appl. Supercond.* **20**, 2010, p. 292-295.
- [38] F. R. Huson et al., “Superferric Magnet Option For The SSC”, *IEEE Transactions on Nuclear Science*, Vol. NS-32, No. 5, October 1985, p.3462-3465.
- [39] P. McIntyre, Texas A&M University, Erice Workshop on High Field Hadron Collider, 1996, unpublished.