REFERENCES

[1] Ezio Todesco et al. "The high luminosity LHC interaction region magnets towards series production". In: *Superconductor Science and Technology* 34.5 (2021), p. 053001.

[2] DG Whyte et al. "Smaller & sooner: Exploiting high magnetic fields from new superconductors for a more attractive fusion energy development path". In: *Journal of Fusion Energy* 35 (2016), pp. 41–53.

[3] N. Mitchell et al. "The ITER Magnet System". In: *IEEE Transactions on Applied Superconductivity* 18.2 (2008), pp. 435–440.

[4] Denis Le Bihan and Thierry Schild. "Human brain MRI at 500 MHz, scientific perspectives and technological challenges". In: *Superconductor Science and Technology* 30.3 (2017), p. 033003.

[5] O Anashkin et al. "Experimental investigation of training and degradation in superconducting magnet systems (SMS)". In: *IEEE Transactions on Magnetics* 13.1 (1977), pp. 673–677.

[6] John M Pfotenhauer, Felix Kessler, and Mohamed A Hilal. "Voltage detection and magnet protection". In: *IEEE transactions on applied superconductivity* 3.1 (1993), pp. 273–276.

[7] Xingzhe Wang, Mingzhi Guan, and Lizhen Ma. "Strain-based quench detection for a solenoid superconducting magnet". In: *Superconductor Science and Technology* 25.9 (2012), p. 095009.

[8] Joseph DiMarco et al. "A full-length quench antenna array for MQXFA production series quadrupole magnet testing". In: *IEEE Transactions on Applied Superconductivity* 31.5 (2021), pp. 1–5.

[9] T Ogitsu et al. "Quench antenna for superconducting particle accelerator magnets". In: *IEEE transactions on magnetics* 30.4 (1994), pp. 2273–2276.

[10] Stoyan Stoynev and Joe DiMarco. "Flex-PCB quench antenna developments at FNAL". In: *IEEE Transactions on Applied Superconductivity* 32.6 (2022), pp. 1–5.

[11] Maxim Marchevsky. "Quench detection and protection for high-temperature superconductor accelerator magnets". In: *Instruments* 5.3 (2021), p. 27.

[12] Maxim Marchevsky. "Understanding training in superconducting accelerator magnets using acoustic emission diagnostics". In: *arXiv preprint arXiv:2203.08871* (2022).

[13] Miryeong Song et al. "Evaluation of commercial-off-the-shelf (COTS) electronics for extreme cold environments". In: *2018 IEEE Aerospace Conference*. IEEE. 2018, pp. 1–12.

[14] Makoto Takayasu. "An acoustic quench detection method for CICC conductor operating in gas or liquid". In: *IEEE Transactions on Applied Superconductivity* 29.5 (2019), pp. 1–5.

[15] Makoto Takayasu. "Acoustic MEMS sensor array for quench detection of CICC superconducting cables". In: *IEEE Transactions on Applied Superconductivity* 30.4 (2020), pp. 1–5.

[16] Makoto Takayasu et al. "REBCO Conductor Quench Detection Tests for MEMS Acoustic Sensor Array Diagnostics". In: *IEEE Transactions on Applied Superconductivity* (2024).

[17] I Valiente-Blanco et al. "Characterization of commercial-off-the-shelf electronic components at cryogenic temperatures". In: *Instruments and Experimental Techniques* 56 (2013), pp. 665–671.

[18] PC Van Niekerk and CJ Fourie. "Cryogenic CMOS-based control system". In: *AFRICON 2007*. IEEE. 2007, pp. 1–7.

[19] Xiao Xue et al. "CMOS-based cryogenic control of silicon quantum circuits". In: *Nature* 593.7858 (2021), pp. 205–210.

[20] Zijia Zhao et al. "Characterization of MEMS acoustic sensors and amplifiers in cryogenic fluids for quench detection applications in HTS CICC". In: *IEEE Transactions on Applied Superconductivity* 31.5 (2021), pp. 1–5.

[21] Randall K Kirschman. "Low-temperature electronics". In: *IEEE Circuits and Devices Magazine* 6.2 (1990), pp. 12–24.

[22] L. Rossi. *An Introduction to Particle Accelerators*. https://cas.web.cern.ch/sites/default/files/lectures/divonne-2009/rossi.pdf. Accessed on: April 24, 2024. 2009.

[23] ID Conway Lamb et al. "An FPGA-based instrumentation platform for use at deep cryogenic temperatures". In: *Review of Scientific Instruments* 87.1 (2016).

[24] Infineon Technologies AG. *IM73A135V01: IP57 dust and water resistant analog XENSIVTM MEMS microphone*. Product datasheet, https://www.infineon.com/dgdl/Infineon-IM73A135-DataSheet-v01$_0 0 - EN.pdf?fileId = 8ac78c8c7f2a768a017fadec36b84500$. Infineon Technologies AG. 2021.

[25] Senay Negusse, Peter Händel, and Per Zetterberg. "On SNR estimation using IEEE-STD-1057 three-parameter sine wave fit". In: *2013 IEEE International Instrumentation and Measurement Technology Conference (I2MTC)*. IEEE. 2013, pp. 658–661.