**MDP conference contributions: CEC-ICMC 2021**

1. “Cold Electronics System Integration for Cryogenic Applications”, M. Turqueti (invited)
2. “Cryogenic electronics for superconducting magnet instrumentation”, M. Marchevsky (invited)
3. “R&D needs for "cold" electronics for superconducting magnets - Fermilab perspective”, S. Stoynev (invited)
4. “Nb3Sn conductors with high specific heat”, X. Xu
5. “Radiation effects on REBCO coated conductors and implications for Fusion Magnets”, C. Reis
6. “Advances in Cryogenic Integrated Circuits at Lawrence Berkeley National Laboratory”, C. Grace (invited)
7. “DUNE Far Detector 2 Photon Detector System cold electronics R&D path”, R. A. Rivera
8. “Improvement of the pinning performance in Nb3Sn for high field applications”, C. Tarantini (invited)
9. “Nb3Sn conductors with artificial pinning centers”, X. Xu
10. “Advances in Bi-2212 round wire conductor”, E. Hellstrom
11. “Quantification of Magnetization of Round RebCo Conductors and Bi:2212 cables, Models of Magnetization and Creep for use in Magnet Field error Estimations”, M. Sumption
12. “FES/HEP Cable Test Facility Nb3Sn Dipole Superconductor - Lessons Learnt and Key Challenges”, Ian Pong & Paolo Ferracin (invited)
13. “Design of the cryostat for High Field Vertical Magnet Testing Facility at Fermilab”, S. Koshelev
14. “Using 3D printing technologies in high-field accelerator magnet coils”, I. Novitski (invited)

**MDP-related conference contributions (planned): MT27**

1. “Analysis of quench data and performance of MDPCT1 – the 15 T Nb3Sn dipole demonstrator”,S. Stoynev, FRI-OR6-101-02
2. “Main results and lessons learned from the MDPCT1 R&D program”, A. Zlobin (invited), FRI-OR6-101-01
3. “Development of a small-aperture cos-theta dipole insert coil based on Bi2212 Rutherford cable and stress management structure”, A. Zlobin, FRI-OR7-303-04
4. “HTS dipole magnet development based on the COMB magnet technology with round REBCO conductors”, V. Kashikhin, FRI-OR7-303-08
5. “Comparative Analysis of MAXFAP1b Coils with respect to Magnet Training Behavior”, S. Krave, WED-PO2-716-01
6. “Flex-PCB quench antenna developments at FNAL”, S. Stoynev, WED-PO2-721-04
7. “Development of a 120-mm aperture Nb3Sn dipole coil with stress management”, I. Novitski, TUE-PO1-110-05
8. “Minimum Quench Energy of Nb3Sn Wires and Rutherford Cables with High Specific Heat”, E. Barzi, THU-PO3-710-06
9. “Minimum Quench Energy of NbTi and Nb3Sn Conductors Impregnated with High Heat Capacity Resin”, E. Barzi, THU-PO3-710-07
10. “HTS Dipole Magnet Model for the Persistent Current Operation”, V. Kashikhin, TUE-PO1-106-05
11. “A Quench Detection and Monitoring System for Superconducting Magnets at Fermilab”, G. Chlachidze, WED-PO2-706-02
12. “Current Status of the Facility for High Field Cable Testing at Fermilab”, G. Velev, WED-PO2-723-04
13. “Quench protection of a large aperture 15 T Cable Test Facility Nb3Sn Magnet”, V. Marinozzi, TUE-PO1-705-07
14. “Improving critical current in ternary APC Nb3Sn superconductors by using internal oxidation method”, X. Peng, THU-OR5-601-01
15. “Procedural solutions for determining the temperature dependence of transport critical current in Nb3Sn superconducting wires using magnetization measurements”,I. Pong, WED-PO2-604-12
16. “Design and test results for a canted-cosine-theta dipole subscale magnet series”, D. Arbelaez, WED-OR2-703-08
17. “Investigation of magnet training and quench precursors with acoustic emission“, M. Marchevsky, WED-PO2-721-06
18. “Quench Antenna Investigation of Mechanical and Magnetic disturbances in Nb3Sn CCT Subscale Magnets”, M. Marchevsky, THU-PO3-109-06
19. “678. Ultrasonic Waveguides for Quench Detection in HTS Magnets”, M. Marchevsky, THU-OR4-704-06
20. “Progress Towards Hall Sensor-Based Quench Detection in CORC® Cables”, R. Teyber, WED-P02-721-09
21. “Towards 20 T hybrid accelerator dipole magnets”, P. Ferracin, FRI-OR6-101-04
22. “Lessons Learned in the Development of Accelerator Magnets based on Nb3Sn and HTS”, S. Gourlay, WED-SS Special Session (invited)
23. “Integration of Bi-2212 and Nb3Sn CCT magnets for a hybrid magnet test”, L. Garcia Fajardo, FRI-OR7-303-03
24. “Engineering design of a large aperture 15 T cable test facility dipole magnet”, J. L. Rudeiros Fernandez, THU-OR5-301-05
25. “Assembly and mechanical analysis of the Canted-Cosine-Theta subscale magnets”, J. L. Rudeiros Fernandez, WED-PO2-723-02
26. “Magneto-Mechanical Optimization of Cross-sections for cos 𝜃 Accelerator Magnets“, G. Vallone, WED-PO2-111-09
27. “Novel Insulation Designs for Nb<sub>3</sub>Sn Rutherford Cables for Particle Accelerator Magnets”, G. Vallone, WED-PO2-616
28. “Numerical Modelling of the Interfacial Debonding in Superconducting Magnets”, G. Vallone, TUE-PO1-715
29. “611. Design of CCT6: a large-aperture, 12 T, Nb3Sn Dipole Magnet”, L. Brouwer, TUE-PO1-110-04
30. “Quench detection and protection of high-temperature superconducting magnets: The case of a Bi-2212 Rutherford cable canted-cosine-theta dipole magnet”,C. Reis, THU-PO3-707-10
31. “Field Quality Measurements of High-Temperature Superconducting Canted Cosine Theta Accelerator Magnets”, C. Myers, WED-OR3-702-03
32. “A subscale canted cosθ dipole magnet using high-temperature superconducting STAR™ wires”, X. Wang (invited), WED-PO2-723-03
33. “Use of Critical Current Distribution Measurements in Bi-2212 Round Wires as a tool to significantly enhance and stabilize the *J*c properties”, S. Barua, WED-PO2-610-08
34. “Test Results of Alternative Magnet Technologies for HTS Magnet Quench Detection and Protection” D. Davis, TUE-PO1-705-10
35. “Experimental Study on Effectiveness of Different Reinforcement Layouts Applied to Recent Bi-2212 Test Coils”, Y. Kim, FRI-OR7-303-05
36. “Bi-2212 Coil Technology”, U.P. Trociewitz, WED-OR2-302-08