

# Millikelvin-Capable Quantum Labs at University of Minnesota-Twin Cities

#	PI / Group (School/ Center)	Core Quantum Focus	mK Platform & Specs	Notes
1	<b>Vlad S. Pribiag — Topological Quantum Devices Lab</b> (Physics/ IMTQCS)	Majorana nanowires, cQED read-out	Oxford Triton DR (13 mK, 6 T-1 T-1 T vector) & Bluefors DR (< 10 mK) ( <a href="#">IMPTQCS</a> , <a href="#">College of Science and Engineering</a> )	Rapid sample-exchange puck; microwave & DC wiring
2	<b>Martin Greven — Quantum Materials &amp; Strongly Correlated Systems</b> (Physics/MRSEC)	Cuprate & nickelate superconductivity; heavy fermions	Quantum Design 16 T PPMS w/ dilution insert, 50 mK base T ( <a href="#">MRSEC</a> , <a href="#">Center for Quantum Materials</a> )	First 16 T/50 mK PPMS at a U.S. university
3	<b>Ke Wang — 2-D Quantum Electronics Lab</b> (Physics)	Twistronics, valleytronics, quantum-Hall edge control	Bluefors DR, 12 T solenoid, 12 mK base T ( <a href="#">College of Science and Engineering</a> )	Glove-box integration for vdW devices
4	<b>SuperCDMS Cryogenic Detector Test Facility</b> (Mandic/ Cushman, Physics)	Phonon-mediated Ge/Si dark-matter detectors	Dedicated SuperCDMS DR, ≈ 15 mK ( <a href="#">supercdms.slac.stanford.edu</a> , <a href="#">College of Science and Engineering</a> )	On-campus QC before SNOLAB deployment
5	<b>Gang Qiu — Quantum Electronic Device Laboratory (QED-Lab)</b> (ECE)	Low-dimensional materials, cryo-electronics, quantum devices	Quantum Design DynaCool (1.7 K–400 K, 9 T) with dilution-insert, 45 mK base T ( <a href="#">Google Sites</a> , <a href="#">qdusa.com</a> , <a href="#">College of Science and Engineering</a> )	Two-axis rotator; cryo-electronics for 2-D/ topological systems

DR: Dilution Refrigerator (millikelvin temperature range)