

Dr. Lance Cooley

Lance Cooley is presently the Head of the SRF Materials Group at Fermi National Accelerator Laboratory, Chicago, Illinois, U.S.A. He has been working in superconducting materials for the past 26 years.

After receiving a BA in Physics from the University of Chicago in 1986, Lance Cooley undertook graduate studies in the group of David Larbalestier at the University of Wisconsin, Madison, and received a Ph.D. in Materials Science in 1993. His Ph.D. thesis examined artificial flux-pinning nanostructures in superconducting Student Award. He then accepted a National Research Council Fellowship at the National Institute of Standards and Technology in Boulder, Colorado, where he worked on superconducting and magnetic standards. He returned to Wisconsin in 1996 as a principal investigator, exploring niobium-tin superconductors and transition edge sensors for space physics. He also served as a lecturer in the Chemistry Department.

In 2002, he moved to Brookhaven National Laboratory, working in the Condensed Matter Physics and Materials Science Department and also with the Superconducting Magnet Division. In 2005, Lance and Dr. Qiang Li took over leadership of the Superconducting Materials Group from the late Dr. Masaki Suenaga. In 2007 he moved to Fermilab to take his present position. In 2004, Lance Cooley was elected as a Fellow of the Institute of Physics. He was also recognized by the U.S. Department of Energy as an Outstanding Mentor for his work with students.

His research interests and areas of expertise include: high-field superconducting materials; superconducting wires, strands and cables; superconducting thin films and multilayers; materials and applications for renewable energy; materials science of niobium, compounds; magnesium diboride compounds; Superconducting radio-frequency cavities; flux pinning and critical currents; and superconducting standards.

Lance Cooley has published over 70 research articles and is the North American Regional Editor for the journal Superconducting Science and Technology and the Editor-in-Chief of the 2012 Applied Superconductivity Conference. He is also the founder of the U.S. Advisory Committee on Superconducting Standards and serves in a great number of highly regarded committees.

He is also Chair of the Peoples Fellowship Committee at Fermilab.





